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ABSTRACT

A bibliography pertaining to the environment, environmental education, and environmental education programs and materials is presented in this compilation. Citations were obtained from Research in Education (RIE), "inhouse" files on environmental education from Project RISE (Research and Information Services for Education), and various bibliographies. Content of the bibliography is organized in accordance with the parameters of the project. These include: time span (RIE citations from January, 1967 to March, 1971); grade level (kindergarten through twelfth grade); emphasis (ecology, pollution, and environmental education); sub-areas (curriculum, curriculum units, and experiments); evaluative instruments; books and materials about the environment, including films, filmstrips, transparencies, kits and charts; programs and projects involved in environmental education; and agencies and organizations. A bibliography of the sources used by Project RISE to assemble this document is also provided. (BL)

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ENVIRONMENTAL EDUCATION

A BIBLIOGRAPHY PERTAINING TO THE ENVIRONMENT, ENVIRONMENTAL EDUCATION, AND ENVIRONMENTAL EDUCATION PROGRAMS AND MATERIALS.

COMPILED BY: THOMAS F. PEPE

RESEARCH AND INFORMATION SERVICES
FOR EDUCATION

117 W. RIDGE PIKE
CONSHOHOCKEN, PENNSYLVANIA 19428

JULY 1, 1971

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ENVIRONMENTAL EDUCATION

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MANKIND'S INALIENABLE RIGHTS

1. The right to eat well.
2. The right to drink pure water.
3. The right to breathe clean air.
4. The right to decent, uncrowded shelter.
5. The right to enjoy natural beauty.
6. The right to avoid regimentation.
7. The right to avoid pesticide poisoning.
8. The right to freedom from thermonuclear war.
9. The right to limit families.
10. The right to educate our children.
11. The right to have grandchildren.

–Paul R. Ehrlich

INTRODUCTION

With the advent of environmental concern has come the need for a survey of the available, published information on environmental education. Much of the earlier emphasis in environmental education has been on the development of nature awareness and conservation. Recently, however, the threat of environmental catastrophies has shifted the direction of the educational forces to the study of the environment and of the multi-disciplinary factors that affect it.

This bibliography was compiled at the request of Mr. Edward Garlitz – Science Curriculum Coordinator for Bucks County Schools, Doylestown, Pennsylvania. Following the initial guidelines of Mr. Garlitz's search request, we obtained citations from Research in Education (ERIC), our "inhouse" files on environmental education, and various bibliographies. The periodical literature indexes such as Current Index to Journals in Education (CIJE) and Education Index were not searched because of time constraints and their relative inappropriateness given the parameters of the initial search request. The parameters involved were time span–search ERIC from January, 1967 to March, 1971; grade level–Kindergarten through twelfth grade; emphasis–ecology and environmental education; sub-areas–curriculums, curriculum units, and experiments; evaluative instruments; books and materials about the environment; programs and projects involved in environmental education; agencies and organizations.

With the current emphasis on environmental education, many agencies, both educational and non-educational, have produced materials and documents on this subject. This bibliography represents an attempt to compile some of those documents. Inclusion here-in does not represent endorsement of cited documents by R.I.S.E. in that not all were available for our review.

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THE CURRICULUM DEVELOPMENT COUNCIL FOR SOUTHERN NEW JERSEY
Focus on Environmental Education. Glassboro State College; Glassboro, N.J.

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1970 A Report to the Public. The Council; Mountain Lakes, N.J. 07046.

Report on their environmental education program.

THE NEW JERSEY STATE COUNCIL FOR ENVIRONMENTAL EDUCATION
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Broad plan for environmental education. Available from 355 Route 46, Mountain Lakes, N.J. 07046.

THE NEW JERSEY STATE COUNCIL FOR ENVIRONMENTAL EDUCATION
1970 Master plan for environmental education: A proposal for New Jersey. The Council; Mountain Lakes, N.J. 27 p.

STEGNER, ROBERT W.
1970 A Comprehensive Population Education Project. Delaware University; Newark, Del. 8 p. (ED 039 136).

Describes the development of a population studies program.

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ALLEN, JAMES E.
1970 Education for survival. American Education 6: 20-23 (March).

An article on the environmental situation which stresses the need for environment ecology education.

ANDERSON, JAY E. AND NORMAN JACOBSON
Environmental Learning: An Experimental Summer Program. Science Teacher. p. 37–39 (April).

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1970 Charting the complexities. Saturday Review. p. 56–57 (April 4).

CAULTON
1970 An Ecological Approach to Biology. Journal of the Biology Education 4: 1–10 (March).

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COVERT, DOUGLAS
1969 Toward a Curriculum in Environmental Education. Environmental Education. (February 11–12).

DWYER, ROBERT L.
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1969 Ecology: Why You Must Teach It. Grade Teacher 86: p. 93–95 (January).

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Important questions and answers for teachers who are about to teach environmental education.

GRATZ, PAULINE
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LEVINSON, ELIOT AND SAUL YANOFSKY
1971 After the Water is Clean (or Not), Then What? How? and Why? Journal of the National Council for the Social Studies 35: p. 67–73 (January).

Action-oriented report on what a metropolitan area is doing to environmentally educate inner-city youth.

MARGOLIN, EDYTHE
1971 Ecology in the Primary Grades. Journal of the National Council for the Social Studies 35: p. 53–66 (January).

Based on the premise that the foundation for constructive environmental action is developed in early childhood, she relates to the question – "What should be done?".

NATIONAL PARKS AND CONSERVATION MAGAZINE
1970 National Park Service Education Programs 44: (July).

Review of their efforts to establish a curriculum on environmental and ecological education.

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1970 What can Education Do About Environment? Nation's Schools. p. 60–61 (April).

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ODUM, EUGENE P.
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STEIF, WILLIAM L. AND GEORGE ARNSTEIN
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1969 The Challenge of Environmental Education. Phi Delta Kappan. p. 26–28 (September).

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WALSH, J.
1969 From Here to Ecology. Grade Teacher 86: 20+ (January).

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AMBRY, EDWARD J.
1968 Conference Working Paper, Evaluation for Environmental Education (A Systems Analysis Approach for Self-Evaluation). The New Jersey State Council for Environmental Education; Newark, N.J.

CHERRY, JIM ET AL.
1967 Fernbank Science Center Forest Teacher's Guide – 1967. DeKalb County Board of Education; Decatur, Ga. 54 p. (ED 040 084).

The guide familiarizes teachers with the programs available through Fernbank Science Center.

CONSERVATION AND ENVIRONMENTAL SCIENCE CENTER FOR SOUTHERN NEW JERSEY
1968 Teacher's workshop handbook for resident programs. Center for Southern New Jersey; Brown Mills, N.J. 66 p. (ED 033 788).

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DANIELS, ROBERT
1968 An Evaluation of the Mohican School in the Out-of-Doors. Mohican School in the Out-of-Doors; Perrysville, Ohio. 58 p. (ED 038 218).

Project evaluation data collected from participating pupils, parents of these students, students' homeroom teachers, camp visitors, camp personnel, and workshop participants were evaluated in terms of specific knowledge, utilization of the outdoors as a laboratory, awareness of man's dependence on nature, appreciation of nature's beauty, adaptability to community living, and understanding of national ecological problems.

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1965 The Report of the Currriculum Subcommittee of the committee for Outdoor Education, Richland County and Mansfield City Schools; Mansfield, Ohio.

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DEPARTMENT OF OUTDOOR TEACHER EDUCATION
1965 Outdoor Education Handbook, Northern Illinois University; DeKalb, Ill. 64 p.

Handbook for outdoor education teacher training includes organization and planning, instructional program, and evaluation of pupils and activities.

Yanis, Martin
C. 1970 Outline of Proposal, Formative, Summative, and Comparative Evaluation for Environmental Education. Unpublished (May be contacted at Pennsylvania Department of Education, Harrisburg, Pa.)

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FERNBANK SCIENCE CENTER
1967 Pollution Single Visitation Programs for Grades 5, 6, and 7; DeKalb County, Ga.

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FERNBANK SCIENCE CENTER
1967 High School Biology Programs; DeKalb County, Ga.

Presents concepts for programs entitled Ecological Relationships, Plant and Animal Succession, Plant Groups, Common Seed Plants of Fernbank Forest, Marine Invertebrates, Ferns and Fern Allies, Bird Study, Snakes and Other Reptiles and the Electron Microscope and Techniques.

FERNBANK SCIENCE CENTER
1967 Fernbank Forest Teacher's Guide. DeKalb County Board of Education; DeKalb County, Ga.

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Designed for a one week resident program. Major portion of manual covers equipment, activities undertaken, general rules and regulations.

GILFILLAN, WARREN C. AND ROBERT A. BURGESS, COMPILERS
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Intended for sixth grade classes, this manual describes outdoor school, staff responsibilities, and orientation to the outdoor school. Specific information includes follow-up activities and check list of equipment.

GRILLEY, HELEN ELAINE
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HORN, KENNETH W. ET AL.
1969 The Balarat Center for Environmental Studies. A Report to the Board. Denver Public Schools; Denver, Colo. 28 p. (ED 033 778)

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1969 Outdoor Education – Integrated Outdoor Education into the Curriculum. Journal of Health, Physical Education, Recreation 40: p. 63–64 (June).

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NEW JERSEY STATE COUNCIL FOR ENVIRONMENTAL EDUCATION
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RESOURCE–USE OUTDOOR EDUCATION CENTER
1970 An ESEA Title III Project. The Center; Perry, Fla.

Evaluation method for the outdoor education center program on environmental studies

ROLLER, ELIZABETH AND RICHARD GREEN
1967 Outdoor Education Manual for the Natural-Resource Center. Davidson County Metropolitan Public Schools; Nashville, Tenn. 79 p. (ED 038 206).

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ROTH, CHARLES E.
1968 Curriculum Overview for Developing Environmentally Literate Citizens. Conservation and Education Center, Liberty Council of Schools; Lincoln, Mass. 23 p. (ED 032 982).

Basic ideas and concepts relevant to the environment that can be incorporated in existing curriculums. Also ten processes for effectively teaching these concepts.

STUFFLEBEAM, DR. DANIEL L.
1968 Evaluation as Enlightenment for Decision-Making. Evaluation Center, The Ohio State University; Columbus, Ohio.

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1970 The Field Experience. Carteret County Marine Science Project; Carteret County, N.C.

A teacher's guide to the rationale and techniques of field ecology (All grades).

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ALBUQUERQUE PUBLIC SCHOOLS
1968 Albuquerque Public Schools Teacher's Guide to Outdoor Education. Albuquerque Public Schools; Albuquerque, N. Mex. 25 p. (ED 027 983).

Preparation manual for field trips.

BRENNAN, MATTHEW J., ED.
1970 People and Their Environment: Teacher's Curriculum Guides to Conservation Education. J.G. Ferguson Publishing Co.; Chicago, Ill.

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"A fourth grade unit on individual adaptation to a marine environment."

CHAPMAN, FRANK L.
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A fifth grade unit on interrelationships of coastal plants and animals.

CHAPMAN, FRANK L.
1970 The Ocean and Modern Man. Carteret County Marine Science Project;Carteret County, N.C.

A sixth grade introduction to man's use of the coastal resources and his effect on the environment.

COLE, RICHARD C.
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EVANS, THOMAS
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Guidelines for orienting students toward ecology.

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1970 A Curriculum Activities Guide to Water Pollution and Environmental Studies. Tilton School Water Pollution Program. Tilton, N.H. 520 p.

Guide involves students and teachers in action-oriented activities in the laboratory, in a watershed area, or in both.

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Method for drawing students'attention to the environment and environmental problems.

JAMES, RICHARD L. ET AL.
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A quiz designed to illustrate important concepts in environmental science.

KIESLER, H.
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The author presents tests to be performed by children.

LINSKY, RONALD B. AND RONALD L. SCHNITGER
1969 Marine Science Student Syllabus, Third Edition. Orange County Board of Education; Santa Ana, Calif. 91 p. (ED 039 146).

Manual developed for experience-centered program in oceanology.

MAYER, WILLIAM V.
1970 [A biology unit to stimulate the non-college bound student's interest in environmental studies]. University of Colorado; Denver, Colo.

MICHIGAN STATE DEPARTMENT OF NATURAL RESOURCES
Environmental Education for Intermediate Grades: A Teacher's Manual. The Department; Lansing, Mich. 27 p. (ED 036 448)

Teaching suggestions on the topics of geology, soil conservation and land use, trees, woodlots and forest, and wild-life and fishes.

MICHIGAN STATE DEPARTMENT OF NATURAL RESOURCES

Environmental Education for Junior High Grades: A Teacher's Manual. The Department; Lansing, Mich. 37 p. (ED 036 447).

Teaching suggestions for junior high level. Topics included are geology, water resources, soil and lang use, trees, woodlots and forest, and wild-life and fishes.

MILLIKEN, MARGERET ET AL.

1968 Field Study Manual for Outdoor Learning. Burgess Publishing Co; Minneapolis, Minn. 127 p. (ED 037 295).

Ecology manual for advanced level. Areas covered are mapping the field of study, field study information, a study of soil, a study of water, a study of animals, and a study of weather.

MINNEAPOLIS INDEPENDENT SCHOOL DISTRICT 275

1970 (Environmental Education Units.) Minneapolis Independent School District 275; Minneapolis, Minn. 50 p. (ED 043 510).

Methods of teaching young elementary school students the principles of sampling populations. Also, for grades 4–6 that have knowledge of sampling, an explanation of biological diversity.

MINNEAPOLIS INDEPENDENT SCHOOL DISTRICT 275

1970 (Environmental Education Units.) Minneapolis Independent School District 275; Minneapolis, Minn. 95 p. (ED 043 511).

Use of games to introduce elementary school children to some concepts about environmental factors.

MINNEAPOLIS INDEPENDENT SCHOOL DISTRICT 275

1970 (Environmental Education Units.) Photography for Kids. Vacant Lot Studies. Control Mapping. Minneapolis Independent School District 275; Minneapolis, Minn. 86 p. (ED 042 636).

Technique for use with elementary students when studying field environment. Presented are techniques for photography, for measuring microclimatic factors, and for mapping.

MINNEAPOLIS INDEPENDENT SCHOOL DISTRICT 275

1970 (Environmental Education Units.) Soil Sampling. Stream Profiles. Tree Watching. Plant Puzzles. Minneapolis Independent School District 275; Minneapolis, Minn. 90 p. (ED 042 638).

For elementary school students. Techniques for measuring pH, water holding capacity, and nitrogen holding capacity of soil; methods for mapping and calculating water-shed run off; detailed study of a tree; study of many plants of the same species to show individual variations.

MINNEAPOLIS INDEPENDENT SCHOOL DISTRICT 275

1970 (Environmental Education Units.) Succession in a Micro-Aquarium. Minnows and Models. Brine Shrimp. Minneapolis Independent School District 275; Minneapolis, Minn. 87 p. (ED 042 637).

For elementary school students. Brine shrimp are used to given experience with life cycles and relationships between organisms and environmental factors. Minnows are used to develop a mathematical model (relationship between temperature and activity). Pond water (micro-aquarium) is used to make children aware of the concept of change in natural communities.

MINNEAPOLIS INDEPENDENT SCHOOL DISTRICT 275

1970 Habitat Study. Transect Study. (Environmental Education Units.). Minneapolis Independent School District 275; Minneapolis, Minn. 94 p. (ED 042 635).

Teaching activities for introducing elementary school students to some characteristics of organisms and their environment and to means of sampling a habitat (transect technique) and analyzing the data.

MINNEAPOLIS INDEPENDENT SCHOOL DISTRICT 275

1970 Plants in the Classroom. (Environmental Education Units.). Minneapolis Independent School District 275; Minneapolis, Minn. 66 p. (ED 042 634).

Techniques for use in an elementary school classroom in investigation of plant growth (emphasizing interrelationship between plant and environment), a description of a "nature hunt" for kindergarten pupils (interdisciplinary approach), a method for incorporating nature in art, and classroom activities on recycling are given.

MOHICAN SCHOOL IN THE OUT-OF-DOORS

1969 The Pioneer Student Textbook for the Mohican School in the Out-of-Doors. A Teacher-Guided Study in Your Outdoor Laboratory. The School; Perrysville, Ohio 58 p. (ED 038 216).

Intended for pre-camp preparation and in-camp study. Text includes sections on history, creative expression, botany, birds, soil, and weather.

NEEDHAM, DOROTHY

1970 Pollution—A Teaching. Grade Teacher 88: 36 p (October).

Contains three activity units (Air, Water, and Earth) for middle and upper grades.

NEWMAN, FRANK

Lab Bench/A Water Pollution Study. Burlington Township High School; Burlington, N.J.

NORTH JERSEY CONSERVATION FOUNDATION

C.1970 Environmental Control + Social Studies + Science. The Foundation; Morristown, N.J.

A curriculum guide for Grades 1—3.

O'HARA, J.

1968 Laboratory Demonstration of Oxygen Depletion in Polluted Waters. American Biology Teacher 30: p. 572—574. (September).

OREGON STATE DEPARTMENT OF EDUCATION

1968 Outdoor Education in Oregon Schools. Oregon State Department of Education; Salem, Ore. 126 p. (ED 040 079).

Handbook is designed to aid teachers in setting up programs in outdoor education. Offers many suggestions for student activities.

RAIMIST, ROGER J.

1967 Laboratory Experiences in Marine Biology, Student Edition. Conservation and Environmental Science Center for Southern New Jersey; Brown Mills, N.J. 17 p. (ED 039 145).

Instructions for laboratory exercises using marine organisms. These exercises also deal with ecology.

REUSCH, EILMA

1969 Experiments with Sea Water. Carteret County Marine Science Project; Carteret County, N.C.

Four chemistry experiments suitable for eleventh and twelfth grade chemistry students.

RIENOW, ROBERT

1969 Man Against His Environment. (A Television Series.). State University of New York, Center for Educational Communications; Albany, N.Y. 124 p.

Study guide for a series of 28 television lectures dealing with population. Available from Ballantine Books, Inc., 101 Fifth Ave., New York, N.Y. 10003.

SCARFF, JUDITH M.

1969 Marine Ecology. Carteret County Marine Science Project; Carteret County, N.C.

Lecture, laboratory and field trip materials for an advanced biology class that stresses research – a year long college preparatory course.

SCARFF, JUDITH M. AND WILL HON

1969 The Major Natural Communities of the Carolina Coast. Carteret County Marine Science Project; Carteret County, N.C.

They describe the major environmental factors affecting the plants and animals of the ocean, beach, dune, sound, salt marsh, tidal flat, and jetty habitat. (All Grades).

TAYLOR, BETH

1969 The Field Approach to Coastal Ecology. Carteret County Marine Science Project; Carteret County, N.C.

Units for the Spring and Fall that use the coastal environment to teach ecological principles. Tenth grade level.

TAYLOR, JAMES L.
1965 Science in the Elementary School, Grade 3, A Guide for teachers. Tupelo Public Schools; Tupelo, Miss. 115 p. (ED 017 441).

A curriculum that includes a section on ecology.

TAYLOR JAMES L.
1965 Science in the Elementary School, Grade 4, A Guide for Teachers. Tupelo, Miss. 104 p. (ED 017 442).

A curriculum that includes a section on ecology.

TAYLOR, JAMES L.
1965 Science in the Elementary School, Grade 5, A Guide for Teachers, Tupelo Public Schools; Tupelo, Miss. 116 p. (ED 017 443).

A curriculum that includes a section on ecology.

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A report describing the patters of inquiry used in ecology.

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1969 An Evaluation of the Deep River Outdoor Education Center – 1969. City Schools of Gary; Gary, Ind.

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C. 1969

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1966 The Influence of an Educational Awareness Experience on Components of Psychological Position Toward an Issue in Conservation; a Methodological Study. Doctoral Dissertation, University of Michigan; Ann Arbor, Mich.

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C. 1969 Testing of Reasoning and Conservation. Office of Special Tests, Measures; Princeton, N.J.

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1970 Pollution, An Environmental Crisis. New York State Education Department, Bureau of Elementary Curriculum Development; Albany, N.Y. 11 p. (ED 039 142).

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1964 Teaching in the Outdoors. Burgess; Minneapolis, Minn.

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1969 The Effects of Pretest, Commitment and Information upon Opinion Change. Education Psychology Measurement 29: p. 653–663.

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SAGER, MARTHA C.
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1965 Integrating Conservation and Outdoor Education into the Curriculum. Burgess; Minneapolis, Minn.

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1969 Evaluation–A Point of View. Journal of Outdoor Education 3: p. 14–15.

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Tips and Tricks in Outdoor Education. Interstate Printers and Publishers; Danville, Ill.

Includes chapters on ecological studies and water.

TRIEZENBERG, HENRY J.
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The tests were prepared for use with a study which determined the effect of advanced organizers in teaching selected concepts of ecological systems at the junior high school level.

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1968 The Use of an Advance Organizer in Teaching Selected Concepts of Ecological Systems. Wisconsin University; Madison, Wis. 51 p. (ED 020 909).

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1970 Environmental Quality – The First Annual Report of the Council on Environmental Quality. United States Department of Health, Education and Welfare; Washington, D.C.

Air Pollution–What it is, what it does and how to curb it.

U.S. GOVERNMENT PRINTING OFFICE
C.1967 A Digest of State Air Pollution Laws 1967 Edition. Superintendent of Documents, U.S. Government Printing Office; Washington, D.C.

VAN DER SMISSEN, BETTY AND OSWALD H. GOERING
1965 A Leader's Guide to Nature – Oriented Activities. The Iowa State University Press; Ames, Iowa. 210 p.

Similar to the Boy Scout Handbook, but related to outdoor education.

Films

ADVENTURES IN NATURE

Nine Filmstrips – Grades 2–4. An Introduction to Ecology. Available from Jam Handy School Service, 2781 E. Grand Blvd., Detroit, Mich. 48211.

AIR POLLUTION

15 min. color film that illustrates the problems posed by air pollution and the steps being taken to correct them ($8.00).

Available from Encyclopedia Britannica Educational Corporation, 425 N. Michigan Ave., Chicago, Ill. 60611

AIR POLLUTION: TAKE A DEEP DEADLY BREATH

16 mm 54 min. color film ($35.00).

Available from McGraw-Hill, ABC Documentary, Film Rental Office, 330 W. 42nd St., New York, N.Y. 10036

ANIMALS AND THEIR HOMES

16 mm 10 min. film (K–4). Presents various types of animal homes – their location, the building material used, and protection it provides in a specific environment. No. F-8.

Available from Resource – Use Outdoor Education Center, RFD No. 1, Box 326, Perry, Fla. 32347

BEARGRASS CREEK

19 min. color film portraying the tragedy of a small tributary from its promising start to its end due to pollution ($15.00).

Available from Stuart Finley Productions, 3428 Mansfield Rd., Falls Church, Va. 22041

BY LAND, SEA AND AIR

31 min. color film about the effects of pesticides on farm workers and environment of California ($5.00/day).

Available from Citizen's Legislative Department, Oil, Chemical & Atomic Workers International Union, 1125 16th St., N.W., Washington, D.C. 20036

THE CHANGING BALANCE OF NATURE

16 mm 10 min. film (Jr. high - high school). Utilizing several plants and animals as examples, the constantly changing factors that affect the survival of an organism are illustrated. No. F-5.

Available from Resource - Use Outdoor Education Center, RFD No. 1, Box 326, Perry, Fla. 32347

CLEAN WATER

20 min. color film that illustrates the dangers of water pollution and the correct sewage treatment ($9.00). Order No. 3972.

Available from Extension Media, University of California, Berkeley, Calif. 94720

CRISIS ON KANAWHA

20 min. color film that illustrates the sources of industrial water pollution and methods of eliminating it ($15.00).

Available from Stuart Finley Productions, 3428 Mansfield Rd., Falls Church, Va. 22041

ESTUARINE HERITAGE

16 mm sound and color film describing the importance of estuaries and the threatening factors of pollution, dredging, filling, etc.

Available from Bureau of Commercial Fisheries, Audio Visual Services, Room 601, 1815 North Fort Myer Drive, Arlington, Va. 22209

FIRST MILE UP

28 min. B/W film about the problems of air pollution and its effect on human health ($8.00).

Available from Contemporary (Film Rental Offices, McGraw-Hill), 330 W. 42nd St., New York, N.Y. 10036

IF YOU LIVE IN A CITY, WHERE DO YOU LIVE?

Five 30 min. color and sound films produced to get children to explore and analyze their urban environment. An experimental curriculum unit for grades 4–6.

Available from National Instructional Television Center, Box A, Bloomington, Ind. 47401

IT'S YOUR DECISION: CLEAN WATER

16 mm color 14½ min. Film (League of Women Voters and The Soap and Detergent Association).

Available from Association Films, Inc., 600 Grand Ave., Ridgefield, N.J. 07657

JUST BEYOND THE CHALKBOARD

16 mm 20 min. color film that introduces teachers to the outdoor classroom. It illustrates how teachers (K–12) can effectively use the outdoor center. No. F-1. Produced by Northern Illinois University.

Available from Resource – Use Outdoor Education Center RFD NO. 1, Box 326, Perry, Fla. 32347

NOISE: NEW POLLUTANT

30 min. B/W Film ($7.50).

Available from Extension Media Center, University of California, Berkeley, Calif. 94720

NO ROOM FOR WILDNERNESS? (POPULATION EXPLOSION)

28 min. sound and full color Sierra Club film ($5.00).

Available from Association Films, 600 Grand Ave., Ridgefield, N.J. 07657

OUR CHANGING ENVIRONMENT

17 min. color film that illustrates man's increasing ability to control his environment and the new pressures and problems this has caused for the modern city ($8.00).

Available from Encyclopedia Britannica Educational Corporation, 425 N. Michigan Ave., Chicago, Ill. 60611

PLANT-ANIMAL COMMUNITIES: ECOLOGICAL SUCCESSION

16 mm 14 min. Film (grades 6–12) that illustrates the factors which influence ecological succession (the long term replacement of one organism for another). No. f-4.

Available from Resource – Use Education Center, RFD No. 1, Box 326, Perry, Fla. 32347

PLANT AND ANIMAL COMMUNITIES: INTERRELATIONSHIPS

16 mm 14 min. Film (grades 6–12) that illustrates the interrelationship among plants and animals from a variety of habitats. No. F-3.

Available from Resource – Use Outdoor Education Center, RFD No. 1, Box 326, Perry, Fla. 32347

THE POISONED AIR

60 min. B/W Film (CBS documentary).

Available from Carousel Films, Inc., 1501 Broadway, New York, N.Y. 10036

POISONS, PESTS AND PEOPLE

55 min. B/W Film illustrating the results of indiscriminate use of pesticides on wildlife and people ($16.00)

Available from Contemporary (Film Rental Office McGraw-Hill), 330 W. 42nd St., New York, N.Y. 10036

POPULATION ECOLOGY

28 min. B/W film on the ecological consequences if the population growth is not brought under control.

Available from Contemporary (Film Rental Office, McGraw-Hill), 330 W. 42nd St., New York, N.Y. 10036

THE PROBLEM WITH WATER IS PEOPLE

30 min. B/W film which traces the route of the Colorado River and discusses its pollution ($16.00).

Available from Contemporary (Film Rental Office, McGraw-Hill), 330 W. 42nd St., New York, N.Y. 10036

THE RIVER MUST LIVE

16 mm sound and color film which illustrates the effects of pollutants on a river and demonstrates the abatement of pollution.

Available from Shell Oil Company, Film Library, 450 North Meridian, Indianapolis, Ind. 46204

SONG OF THY WORKS

16 mm 10 min. film produced by John H. Storer portrays the magnificence of the natural world (K–12). No. F-2.

Available from Resource – Use Outdoor Education Center, RFD No. 1, Box 326, Perry, Fla. 32347

THE THIRD POLLUTION

30 min. color film which describes America's four billion dollar solid waste problem and new techniques of solid waste management (Free).

Available from Environmental Control Administration, 12720 Twinbrook Parkway, Rockville, Maryland 20852, Attn: Tom Edgan

TROUBLED WATERS

16 mm sound and color film describing pollution in the United States.

Available from U.S. Senate Public Works Committee, Room 4204, New Senate Office Building, Washington, D.C. 20510

WATER POLLUTION

15 min. color film that presents the health problems posed by water pollution and steps taken to correct them ($8.00).

Available from Encyclopedia Britannica Educational Corporation, 425 N. Michigan Ave., Chicago, Ill. 60611

WHY PLANTS GROW WHERE THEY DO

16 mm 10 min. Film (K–6). Presenting the reasons for the growth of specific plants in one type of area in various habitats–an open field, a woodland, a desert and a pond. These communities are then set up in a glass terrarium. No. F-9.

Available from Resource – Use Outdoor Education Center, RFD No. 1, Box 326, Perry, Fla. 32347

Filmstrips and Transparencies

AIR POLLUTION AND WATER POLLUTION

Overhead transparency sets 70016 and 70015 - includes two filmstrips and a group of transparencies with overlays which outline ways to cope with pollution problems. Junior-high and secondary schools.

Available from Scott Education Division, Box 391, Holyoke, Mass. 01040

BIOLOGY - ECOLOGICAL ASPECTS

Overhead Transparency Program (Grade 6–12) that presents the basic principle of ecology. Includes energy source, inter-dependence, competition, predation, and ecological limitations. No. T-6.

Available from Resource - Use Outdoor Education Center, R.F.D. No. 1, Box 326, Perry, Fla. 32347

BIRDS

Color Slide Program (K-8) National Audubon Society Series. Description and illustration of some common birds. Also presented are the various characteristics of the bird's nest building and habitats. No. 5-2.

Available from Resource - Use Outdoor Education Center, R.F.D. No. 1, Box 326, Perry, Fla. 32347

ECOLOGICAL SYSTEMS

Four film strips with two records. Includes ecology of a seashore, forest pond, and desert.

Available from Imperial Film Co., 321 S. Florida Ave., Lakewood, Fla. 33803

ECOLOGY

Color Slide Program (K-12) National Audubon Society Series. Overview of ecology - topics include the sun, farmland, water, earth, interrelationships of insects and flowers, and major biomes (life zones) found in America. No. 5-1.

Available from Resource - Use Outdoor Education Center, R.F.D. No. 1, Box 326, Perry, Fla. 32347

ECOLOGY

Transparency duplicating book - includes twelve overhead projectuals, four duplicating masters, and a bound teacher's guide.

Available from Milliken Publishing Co., 611 Olive St., St. Louis, Mo. 63101

ENVIRONMENTAL CRISIS: WHAT THE INDIVIDUAL CAN DO

17 min. color sound filmstrip (upper elementary grades to college) about solutions to the traffic, air, and non-degradable litter problem ($15.00).

Available from NEA Publications, Sales Section, 1201 - 16th St., N.W., Washington, D.C. 20036

ENVIRONMENTAL DECISION: AN INQUIRY

1970 Five filmstrips intended to stimulate class discussion on alternative solutions to problems of environment concerning forests, air, wild life, soil, and water.

Available from B.F.A. Educational Media, 2211 Michigan Ave., Santa Monica, Calif. 90404

THE ENVIRONMENT OF MAN - AN INTRODUCTION TO ECOLOGY

Four filmstrips with four records for the middle and upper elementary grades. An introduction to ecology, eco-system, and natural and man-made change.

Available from Educational Coordinates, 432 S. Pastoria Ave., Sonnyvale, Calif. 94086

ENVIRONMENT POLLUTION: OUR WORLD IN CRISIS

Set of six filmstrips which presents the consequences of air, water, and land pollution.

Available from Wards Natural Science Foundation, P.O. Box 1712, Rochester, N.Y. 14603

MAN AND HIS ENVIRONMENT: A NEW APPROACH TO ENVIRONMENTAL EDUCATION

A 14 min. color sound filmstrip developed from the booklet, plus the booklet, a script, and guide for using the film strip ($17.00). Stock No. 388-11900.

Available from National Education Association, 1201 16th St., N.W., Washington, D.C. 20036

POLLUTION

Six filmstrips with records that illustrate the immediate and critical pollutants, and presents ways in which children can help. Intermediate Grades.

Available from Ealing Films, 2225 Massachusetts Ave., Cambridge, Mass. 02140

UNDERWATER ENVIRONMENT

Four filmstrips and four records.

Available from Imperial Film Co., 321 S. Florida Ave., Lakewood, Fla. 33803

Kits, Charts, etc.

BIOLOGICAL AND CHEMICAL POLLUTION TEST KITS

Material for the identification of chemical and biological pollution in water.

Available from Scott Scientific, Inc., P.O. Box 21215, Fort Collings, Colo. 80521.

PASKAL, DOLORES ET AL.

1969 New Roles and Relationships for Students in School and Community Setting. Wayne County Intermediate School District; Detroit, Mich. 1 p. (ED 034 714).

One game is designed to teach elementary school students about economic, technological and political aspects of air and water pollution control.

Sources

THE BOY SCOUTS OF AMERICA
North Brunswick, N.J. 08902

Has teaching aids - booklets, wall charts, etc.

CHAPMAN, FRANK L.
1969 Marine Science Film Catalogue. Carteret County Marine Science Project; Carteret County, N.C.

CONSERVING OUR WATER AND CLEARING THE AIR
American Petroleum Institute, 1271 Avenue of the Americas, New York, N.Y. 10020

Includes student manuals, research materials booklet, teacher's guide, and posters - free to teachers and student-teachers.

CUZON DU REST, R. P.
Films on Oceanography. Superintendent of Documents, U.S. Government Printing Office; Washington, D.C.

HUG AND SONS
Outdoor Education Specialists, R.D. No. 1, Box 97, Mill Run, Pa. 15464

They have books, learning aids, and equipment.

JOURNAL OF THE NATIONAL COUNCIL FOR THE SOCIAL STUDIES
1971 A Service of: Student. National Education Association 35: p. 112 (January).

Five filmstrips and five L.P. record albums (high school) showing divergent opinions on pollution topics. Available from National Education Association, 1201 16th St., N.W. Washington, D.C. 20036.

PENNSYLVANIA DEPARTMENT OF HEALTH FILM LIBRARY
Division of Public Health Education, P.O. Box 90, Harrisburg, Pa. 17120

They have films on air pollution, water pollution and what Pennsylvania is doing to control them.

YEATER, L. W.
1967 A Field Experience - A Why, A How. Regional Carteret County Marine Science Project; Beaufort, N.C. 13 p. (ED 020830).

Offers marine biology field trip and provides a source of oceanological materials.

Kindergarten through Twelfth Grade Books

ARNESON, D. J.
1971 Secret Places. Holt, Rinehart and Winston, Inc.; New York, N.Y.

Related to conservation - juvenile reading level.

BARTLETT, MARGARET F.
1963 Down the Mountain. Scott (Addison-Wesley Publishing Co.); Reading, Mass.

Illustrates the dynamics of nature by describing the processes of growth and decay (K–3).

BENNEDICT, JEANNE
A Place to Live. Parents' Magazine Press; New York, N.Y.

An explanation of the interrelationships of all organisms.

BILLINGTON, ELIZABETH T.
Understanding Ecology. Frederick T. Warne and Co.; New York, N.Y.

BRENNAN, MATTHEW J.
People and Their Environment. J. G. Ferguson Publishing Co.; Chicago, Ill.

BURTON, MAURICE
1970 Animal Partnerships. Warne, New York, N.Y. 107p.

British naturalist's examination of various associations (6–9).

BUSCH, PHYLLIS S.
At Home in Its Habitat: Animal Neighborhood. World Publishing Co.; New York, N.Y.

A description of animal homes (K–3).

BUSCH PHYLLIS
1969 Once There Was A Tree. World Publishing Co.; New York, N.Y.

A description of the Community living in and around a tree. (grade K-3).

BUSCH, PHYLLIS S.
1969 Puddle and Ponds: Living Things in Watery Places. World Publishing Co.; New York, N.Y.

Illustrates the variety of habitats that maintain life (K–3).

CARRICK, CAROL AND DONALD CARRICK
1970 The Pond. Macmillan; New York, N.Y.

Identification of the larger, more easily recognized animals that live in a pond (PreS–Grade 1).

CHANNING L. BETE CO.

Man and His Endangered World: ABC's of Human Ecology. Channing L. Bete Co.; Greenfield, Mass.

Introduction to the problems of pollution (Upper grades).

CHARTER, S. P. R.

Man on Earth. Grove; New York, N.Y. ($1.50).

A philosophical approach to ecology.

DUDLEY, BITSY AND DORIS KING

1969 A Day with Don at Cape Lookout Seashore. Carteret County Marine Science Project; Carteret County, N.C.

A third grade supplementary reader.

DUDLEY, BITSY AND DORIS KING

1969 Don Explores a Tidal Flat. Carteret County Marine Science Project; Carteret County, N.C.

A third grade supplementary reader

FARB, PETER

1963 Ecology. Time-Life Books; New York, N.Y. ($6.60).

FARB, PETER

The Face of North America. Harper and Row; New York, N.Y.

Description of the natural forces that have shaped the North American Continent including small section on man's effect.

FARRAND, CHARLOTTE, ED.

Ranger Rick. The National Wildlife Federation; Washington, D.C.

A nature magazine for juvenile readers.

FIENDLY, NATALIE

1968 Miraculous Web: The Balance of Life. Prentice-Hall; Englewood Cliffs, N.J.

An introduction to the ecosystems of the tundra, taiga, grasslands, desert, rain forest, and ocean (grade 7 and above).

FULLER, R. BACKMINSTER ET AL.

I Seem to Be A Verb. Gantam; New York, N.Y. ($1.65).

An investigation of man as an integral part of the universe.

GOETZ, DELIA

1969 Rivers. Morrow; New York, N.Y. 63 p.

Gives a general view of the world's rivers, noting the burden of man's pollution. Uses the Potomac as a typical ecosystem (2–6).

HAWES, JUDY
1969 What I Like About Toads. Cowell; New York, N.Y. 33p.

Life cycle of toads and their importance to man (K–3).

HILTON, S.
1970 How Do They Cope with It. Westminster; Philadelphia, Pa.

Related to conservation - juvenile reading level.

HIRSH, S. CARL
1966 The Living Community. Viking Press; New York, N.Y.

HOGNER, DOROTHY CHILDS
1969 Birds of Prey. Cowell; New York; N.Y. 132 p.

Introduction to the appearance, habitat, and feeding and nesting habits of hawks, eagles, falcons, owls, etc. (PreS–2).

HUNGERFORD, H. R.
1971 Ecology: The Circle of Life. Children's Press, Inc.; Chicago, Ill.

Juvenile level of reading.

HURD, CLEMENT
This Is the Forest. Coward-McCann; New York, N.Y.

A description of the rebirth of a forest (K–3).

KORMONDAY, EDWARD J.
1968 Concepts of Ecology. Prentice-Hall; Englewood Cliffs, N.J.

KRUTCH, JOSEPH WOOD
1966 The Great Chain of Life. Pyramid Books; New York. N.Y.

Deals with ecology.

LAYCOCK, G.
1971 Animal Movers: A Collection of Ecological Surprises. Doubleday and Co.; New York, N.Y.

Juvenile reading level.

LAYCOCK, GEORGE
The Alien Animal. Ballantine; New York, N.Y. ($.95).

The effects of an animal on an alien community.

MARX, WESLEY
The Frail Ocean. Ballantine; New York, N.Y. ($.95).

A description of the complex and delicate balance of the ocean's ecosystem and of the effects of pollution on it.

MAY, JULLIAN
1969 Alligator Hole. Follett; Chicago, Ill.

Text and watercolors depict the life of the Everglades with emphasis on the alligator (K–3).

McCLUNG, ROBERT M.
1969 Last Wild America: The Story of Our Extinct and Vanishing Wildlife. Morrow; New York, N.Y. 240p.

Depicts the changing condition of wildlife from the 16th Century to the present time (6–9).

McCOY, J. J.
1970 Shadows Over the Land, Seabury; New York, N.Y. 152p.

The author presents the crisis of pollution in several areas and submits some positive action for young readers (grade 6 and up).

MILNE, LORUS AND MARGERY LORUS
1969 The Nature of Animals. Lippincott; Philadelphia, Pa. 255p.

An introduction to the basic processes of animal life - the interrelationships and the balance of nature.

ODUM, EUGENE P.
1963 ECOLOGY. Holt, Reinhart and Winston; New York, N.Y.

PRINGLE, LAWRENCE
1969 The Only Earth We Have. Macmillian; New York, N.Y. 86p.

Illustrates man's abuse of his planet (5–8).

PRINGLE, LAWRENCE
C.1970 From Field to Forest. World Publishing Co.; New York, N.Y.

The book discusses the ways that plants and animals affect the land (4–6).

REID, KEITH
1970 Nature's Network. Natural History Press; Garden City, N.Y.

An introduction to ecology and various ecosystems (grade 7 and above).

SELSA, MELLICENT E.
1964 Birth of a Forest. Harper and Row Publishers, Inc.; Scranton, Pa.

The book traces the succession of a land area from a pond to a marsh to a forest (K–3).

SHAPP, C. AND M. SHAPP
1962 Let's Find Out About Animal Homes. Watts, Franklin, Inc.; New York, N.Y.

A book about animal ecology for kindergarten to primary grade students.

SHUTTLESWORTH, DOROTHY
1970 Natural Partnerships. Doubleday and Co.; Garden City, N.Y.

Explains mutualism, parasitism, commensalism, and other interrelationships (grade 7 and above).

SIMON, HILDA
1970 Partners, Guests, and Parasites: Coexistence in Nature. Viking Press; New York, N.Y.

Illustrates the interrelationships of different life forms.

SIMON, SEYMOUR
A Handful of soil. Hawthorne Books; New York, N.Y.

Middle and upper grade level reading used in conjunction with a unit on pollution of the earth.

SMITH, FRANCES C.
1954 The First Book on Conservation. Watts, Franklin, Inc.; New York, N.Y.

Presents the concepts of ecology (K–3).

SMITH, FRANCES C.
1969 The First Book of Swamps and Marshes. Watts, Franklin, Inc.; New York, N.Y. 64 p.

Presents the different types of wetlands and their importance to other organisms (6–9).

SMITH, ROBERT
1966 Ecology and Field Biology. Harper and Row; New York, N.Y.

STEPHEN, DAVID AND JAMES LOCKIE
1969 Nature's Way. McGraw-Hill; New York, N.Y.

Illustrates various ecosystems and populations (grade 7 and above).

STORER, JOHN H.
1953 The Web of Life. Signet; New York, N.Y. (paperback).

STORER, JOHN H.
1968 Man and The Web of Life. Signet; New York, N.Y.

This book is about the interrelationships among organisms on this planet.

SWAN, LESTER A.
1964 Beneficial Insects. Harper and Row; New York, N.Y.

TEAL, JOHN AND MILDRED TEAL
Life and Death of the Salt Marsh. Ballantine; New York, N.Y. ($1.25).

A description of the salt marshes and the important part they play in the balance of the environment.

TERRY, MARK
Teaching for Survival. Ballantine; New York; N.Y. ($1.25).

Guide for changing the educational system so that the classroom environment teaches ecology.

TRESSELT, ALVIN
1970 The Beaver Pond. Lothrop; New York, N.Y.

Pictures and text depicting the life of a pond (PreS–3).

WEAVER, E. C., ED.
1968 Scientific Experiments in Environmental Pollution. Holt, Rinehart and Winston; New York, N.Y.

Deals with the topic of ecology for high school students.

WONG, HERBERT H. AND MATTHEW F. VESSEL
Our Tree, Addison-Wesley; Reading, Mass.

A description of the ecology of a community for grades K–3.

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Plant Communities: Where Can Cattails Grow. Addison-Wesley; Reading, Mass.

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CARAS, ROBERT A.
1966 Last Chance on Earth. Chiltone; New York, N.Y.

CARRIGHAR, SALLY
1965 Wild Heritage. Houghton Mifflin; Boston, Mass.

CHRISTIAN, GARTH
1958 A Place For Animals. Butterworth; London, England.

COMMONER, BARRY
1967 Science and Survival. Ballantine; New York, N.Y. ($1.25).

The book points out that scientific development has brought unforeseen dangers.

COX, G. W.
1969 Readings in Conservation Ecology. Appleton-Century-Crofts; New York, N.J.

DARLING, LOUIS AND LOIS DARLING
1968 A Place in the Sun. Morrow; New York, N.Y.

DASMANN, RAYMOND
1964 Environmental Conservation. John Wiley; New York, N.Y.

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1965 The Destruction of California. Macmillan; New york, N.Y.

DeBELL, GARRETT
The Voters Guide to Environmental Politics. Ballatine; New York, N.Y. ($.95).

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1970 The Environmental Handbook. Ballantine/Friends of the Earth; New York, N.Y.

A compilation of articles, speeches and excerpts from books on the following topics: meaning of ecology, individual action, and political action.

DeVOS, ANTHONY ET AL.
1968 The Pollution Reader. Harvest House; Montreal, Canada.

DORST, JEAN
Before Nature Dies. Houghton Mifflin Co.; Boston, Mass.

ECKERT, ALLEN W.
1963 The Great Ark. Little Brown & Co.; Boston, Mass.

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1969 Wild Season. Bantam; New York, N.Y. (paperback)

EHRLICH, PAUL R. AND HARRIMAN, RICHARD L.
How to be A Survivor. A Plan to Save Spaceship Earth. Ballantine; New York, N.Y. ($1.25).

ENVIRONMENTAL ACTION
1970 Earth Day - The Beginning. Bantam Books; New York, N.Y. 233 p.

Includes speeches given on Earth Day.

ERRINGTON, PAUL L.
1957 Of Man and Marshes. Macmillan; New York, N.Y.

FISHER, JAMES ET AL.
1969 Wild Life in Danger. Viking Press; New York, N.Y.

FORTUNE MAGAZINE
1970 The Environment. Harper and Row; New York, N.Y.

Examination of the problems of the environment and the choices to be made.

FULLER, R. BUCKMINSTER
Utopia or Oblivion. Bantam; New York, N.Y. ($1.25).

GOLDMAN, MARSHALL I., ED.
1968 Controlling Pollution: The Economics of a Cleaner America. Prentice-Hall; New York, N.Y.

The author sets forth an economic solution to the pollution problems.

GOLDSTEIN, JEROME
1969 Garbage As You Like It. Rodale Books; Emmanus, Pa.

GRAHAM, FRANK, JR.
1970 Since Silent Spring. Houghton Mifflin Co.; Boston, Mass.

Presents the controversy over Rachel Carson's book, Silent Spring , the conflict behind it, and the vindication of the book.

GROUP FOR ENVIRONMENTAL EDUCATION, INC.
Our Man-Made Environment - Book 7. Group for Environmental Education, Inc.; Philadelphia, Pa.

An introduction to the study of our man-made environment: how we are affected by it, what we want of it, and how we can change it to meet our needs.

HERFINDALH, ORVIS C. AND ALLEN KNEESE
1965 Quality of the Environment. An Economic Approach to Some of the Problems in Using Land Water and Air. Johns Hopkins University Press; Baltimore, Md.

HUTH, HANS
1957 Nature and the American: Three Centuries of Changing Attitude. University of California Press; Berkeley, Calif.

JAFFEE, JOYCE
Conservation: Maintaining the Natural Balance. Natural History Press/Doubleday; Garden City, N.Y.

LAYCOCK, GEORGE
The Diligent Destroyers. Ballantine; New York, N.Y. ($1.25).

An indictment against the Army Corp of Engineers, the strip miners, the highway builders, and others

LEINWAND, GERALD
1969 Air and Water Pollution. Washington Square Press; New York, N.Y. 160 p.

Brief description of air and water pollution and selected readings on problems of air pollution.

LEOPOLD, ALDO
1949 A Sand County Almanac. Oxford University Press; New York, N.Y.

A conservation classic.

MARINE, GENE
America the Raped. Avon; New York, N.Y. ($1.25).

Condemnation of the people that betrayed the land.

MICHELSON, MAX
The Environmental Revolution. McGraw-Hill; New York, N.Y.

MITCHELL, JOHN G. AND CONSTANCE L. STALLINGS
1970 Ecotactics: The Sierra Club Handbook for Environmental Activitists. Pocket Books; New York, N.Y.

Presentation of the environmental movement in the form of essays and case histories.

MOWBRAY, A. Q.
1969 Road to Ruin. J.B. Lippincott; Philadelphia, Pa.

NASH, RODERICK
1968 The American Environment: Readings in the History of Conservation. Addison-Wesley; Reading, Mass.

OSBORN, FAIRFIELD
1948 Our Plundered Planet. Little, Brown & Co.; New York, N.Y.

A conservation classic.

REVEILLE, ROGER AND H.H. LANDSBERG
America's Changing Environments. Houghton Mifflin; Boston, Mass.

RIENOW, ROBERT AND LEONA TRAIN RIENOW
Man Against His Environment. Ballantine; New York, N.Y. ($1.25).

Text from a 26 week T.V. comic series.

RIENOW, ROBERT AND LEONA TRAIN RIENOW
1967 Moment in the Sun. Ballantine; New York, N.Y. (paperback).

SEARS, PAUL B.
1962 Where There is Life. Dell Books; New York, N.Y. (paperback).

SMITHSONIAN INSTITUTION ANNUAL
1968 Fitness of Our Environment. Smithsonian Institution Press; Washington, D.C.

SWATEK, PAUL
The User's Guide to the Protection of the Environment. Ballantine; New York, N.Y. ($1.25).

A consumer's guide to show the effect that the use of products has on the environment.

UDALL, STEWARD L.
1963 The Quiet Crisis. Holt Rinehart and Winston; New York, N.Y.

A conservation classic.

UNITED NATIONS REPORT
Chemical and Bacteriological Weapons and the Effects of Their Possible Use. Ballantine; New York, N.Y. ($1.25).

VOGT, WILLIAM
1948 The Road to Survival. William Sloane Associates; New York, N.Y.

A conservation classic.

WALT, KENNETH E.
1968 Environmental Control. McGraw-Hill; New York, N.Y.

An exposé of the contradiction between what is said and what is done about environmental control.

ZURHORST, CHARLES
The Conservation Fraud. Cowles; New York, N.Y.

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BROWER, DAVID, ED.
1961 Wilderness: America's Living Heritage. Sierra Club; San Francisco, Calif.

CITIZENS ADVISORY COMMITTEE ON ENVIRONMENTAL QUALITY
1969 Report to the President and to the President's Council on Environmental Quality. The Committee; Washington, D.C. 36 p.

Available from 1700 Pennsylvania Avenue, N.W., Washington, D.C. 20006

FISCHER, RICHARD B.
1970 Pollution, An Environmental Crisis. New York State Education Department, Bureau of Elementary Curriculum Development; Albany, N.Y. (ED 039 142).

Causes and extent of environmental problems.

KILGORE, BRUCE, ED
1966 Wilderness in a Changing World. Sierra Club; San Francisco, Calif.

THE LEAGUE OF WOMEN VOTERS
1970 Proposals Explained: Environmental Quality. The National Voter. (February-March).

THE MASSACHUSETTS AUDUBON SOCIETY
The Curious Naturalist. The Society; Lincoln, Mass.

Published during the school year.

U.S. DEPARTMENT OF THE INTERIOR
Conservation Yearbook (series for 1965, 1966, 1967, 1968, 1970). Superintendent of Documents. Government Printing Office, Washington, D.C.

U.S HOUSE OF REPRESENTATIVES
1966 The Adequacy of Technology for Pollution Abatement. Two volumes. U.S. Government Printing Office; Washington, D.C.

Hearings before the Subcommittee on Science Research and Development of the Committee on Science and Astronautics.

U.S. SENATE
1969 Water Pollution. U.S. Government Printing Office; Washington, D.C.

Hearing before the Subcommittee on Air and Water Pollution of the Committee on Public Works.

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1970 The Vindication of Rachael Carson. Saturday Review 53: p. 59 (April 4).

BRODEUR, PAUL
1968 The Magic Mineral. The New Yorker p. 117-165 (October).

BULLETIN OF THE ATOMIC SCIENTISTS
1965 Man and His Habitat: Problems of Pollution. Bulletin of the Atomic Scientists: p. 18–30 (March).

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1968 Can the World be Saved? Bioscience: p. 679 (July)

COMMONER, BARRY
1968 Nature Unbalanced. How Man Interferes With the Nitrogen Cycle. Scientists and Citizen. p. 9–19 (January–February).

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1970 Beyond the Teach-in. Saturday Review 53: p. 50–52+ (April 4).

ECKARDT, WOLF VON
1971 New Town 73 Years Later. Saturday Review 54: p. 61 (February 6).

Article deals with the problems of urban growth and what can and is being done about them.

EHRLICH, PAUL AND JOHN P. HOLDREN
1971 Who Makes the Babies. Saturday Review 54: p. 60 (February 6).

The article expiains that it is the middle class and not the poor that taxes the biosphere.

ENVIRONMENTAL POLLUTION PANEL
1965 Restoring the Quality of Our Environment. U.S. Government Printing Office; Washington, D.C.

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1969 The Silent Epidemic. New Republic: p. 13-14 (November).

About lead poisoning from paint.

FROME, MICHAEL
1968 The Trouble with Mining. Field and Stream: p. 22+ (December)

GREEN, L., JR.
1967 Energy Needs and Environmental Pollution. A Reconciliation? Science 156: 1448-1450

GRINSTEAD, ROBERT B.
1969 No Deposit No Return. Environment: p. 17-23 (November).

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1965 Pest Control: Biological Methods, Specific Chemical Methods. Scientist and Citizen. p. 1-8 (July).

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1968 Pollution control: An International Perspective. Scientist and Citizen: p. 172–182 (September).

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1968 Pesticides and Catastrophe. New Scientist 40: 567-568.

LYON, DAVID L.
1967 An Ecologist's View of the Population Problem. The Living Wilderness: p. 31 (Spring and Summer)

MELLANBY, KENNETH
1969 Can Britain Afford to Be Clean? New Scientist 43: 648-650.

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NIERING, WILLIAM A.
1968 The Effects of Pesticides. Bioscience 18: 869-875.

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1969 A New Pollution Problem. Environment: p. 2+ (May).

RITCHIE-CALDER, LORD
1969 Polluting the Environment. Center Magazine. p. 7-12 (May).

ROBERTS, STEVEN V.
1970 The Better Earth: A Report on Ecology Action, A Brash, Activist, Radical Group Fighting for Better Environment. The New York Times Magazine. 6 p. (March 29).

SAGAN, LEONARD A.
1969 Infant Mortality Controversy: Sternglass and His Critics. Bulletin of the Atomic Scientists: p. 26-32 (October).

SALVIA, JOSEPH D.
1968 Milk and Pesticides. Scientist and Citizen: p. 143-153 (August).

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1970 Cleaning Humanity's Nest. Saturday Review: p. 47–67 (March).

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1968 Scientist and Citizen. (April).

Entire issue is devoted to lead poisoning.

SHEA, KEVIN P.
1968 Cotton and Chemicals. Scientist and Citizen: p. 209-219 (November).

STARK, J. D.
1969 Industry and Pollution. Chemical and Engineering News: p. 7 (January).

WALLACE, ELIZABETH S.
1971 The Individual and the Environmental Revolution. Journal of the National Council for the Social Studies 35: p. 38–43+ (January).

The article is centered on the individual as the key factor in environmental reconstruction.

WILLIAMS, C. M.
1967 Third-generation Pesticides. Scientific American: p. 13–17 (July).

WOLD, LEONARD
1965 Cleaning Up the Merrimack. Bulletin of the Atomic Scientists: p. 16–22 (April).

WOODWELL, G. M.
1967 Toxic Substances and Ecological Cycles. Scientific American: p. 24–31. (March).

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ALEXANDER, TOM
1970 The Environment: A National Mission for the Seventies. Harper and Row; New York, N.Y.

The author explains why combustion is the major source of air pollution.

AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE
1965 Air Conservation. AAAS Publication No. 80; Washington, D.C.

AMERICAN CHEMICAL SOCIETY
1969 Cleaning Our Environment. American Chemical Society; Washington, D.C.

"The Chemical Basis for Action". Available from 1155-16th Street, N.W., Washington, D.C. 20036.

AYLESWORTH, THOMAS G.
1968 This Vital Air, This Vital Water. Rand McNally and Co.; New York, N.Y. 192 p.

Presents facts about pollutants including radioactive emissions, health effects, and control techniques.

BATTAN, LEWIS J.
1966 The Unclean Sky: A Meteorologist Looks at Air Pollution. Anchor Books; Garden City, N.Y. 126 p.

An explanation of meteorology, presented as a means of evaluating solutions to air pollution.

BERNARDE, MELVIN A.
1970 Our Precious Habitat. W.W. Norton and Co.; New York, N.Y., 362 p.

Develops the thesis that although high concentrations of air pollution have been correlated to ill health, low concentrations have not been proven to be detrimental. The book describes in depth the natural defenses of the respiratory system to foreign material.

CARR, DONALD E.
1965 The Breath of Life. Norton; New York, N.Y. ($.95).

An analysis of air pollution.

EDELSON, EDWARD AND FRED WARSHOFSKY
1966 Poison in the Air. Pocket Books; New York, N.Y. 160 p.

Contends that there is evidence that air pollution is harmful to our health and evaluates the way each industry has responded to the public demands for cleaner air.

KAVALER, LUCY
1967 Dangerous Air. John Day Co.; New York, N.Y. 143 p.

Introduction to sources and effects of air pollution in the past and present. Directed at junior high and older.

LEWIS, HOWARD R.
1965 With Every Breath You Take. Crown Publishers; New York, N.Y. 322 p.

Aimed at apathy toward air pollution. The book presses for controls on automotive and industrial emissions and describes sources, public concern and governmental reaction to air pollution.

PERRY, JOHN
1967 Our Polluted World: Can Man Survive? Franklin Watts; New York, N.Y. 213 p.

Presents how air pollution occurs, dangers it poses, history of its disasterous effects, methods for its control, and possible legislation to reduce it.

STEWARD, GEORGE H.
1968 Not So Rich as You Think. Houghton, Mifflin; Boston, Mass. 248 p.

Chapters on smog, smoke, carbon dioxide, and atomic waste.

STILL, HENRY
1967 The Dirty Animal. Hawthorn Books; New York, N.Y. 298 p.

Describes lesser known air pollution problems and action taken by local communities to control air pollution.

U.S. PUBLIC HEALTH SERVICE
1969 Air Pollution Publications: A Selected Bibliography with Abstracts. 1966–1968. U.S. Government Printing Office; Washington, D.C.

WISE, WILLIAM
1968 Killer Smog. Rand McNally and Co.; Chicago, Ill. 181 p.

An account of several people who were involved in the London smog of 1952.

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AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE
1965 Air Conservation, Pub. No. 80. The Association; Washington, D.C. 335 p.

Report to scientists and layman about air pollution and its effects.

AMERICAN CHEMICAL SOCIETY
1969 Cleaning Our Environment: The Chemical Basis for Action. The Society: Washington, D.C. 249 p.

Describes methods available to detect, predict movement, and control air pollution.

CHANNING L. BETE COMPANY
1969 Needed: Clean Air. Channing L. Bete Company; Greenfield, Mass.

Presents the facts about air pollution.

THE CONSERVATION FOUNDATION
1970 Your Right to Clean Air. The Conservation Foundation; WAshington, D.C.

Explains the provisions for action in the 1967 Air Quality Act and offers suggestions for public action.

DEGLER, STANLEY E.
1969 State Air Pollution Control Laws. The Bureau of National Affairs Incorporated; Washington, D.C. 86 p.

MANUFACTURING CHEMISTS ASSOCIATION
Source Material for Air Pollution Control Laws. The Association; Washington, D.C.

Contains air pollution control statutes.

MIDDLETON, JOHN T.
1970 Air Pollution: Some Lessons Learned in the United States. U.S. Department of Health, Education and Welfare; Washington, D.C.

MOBIL OIL CORPORATION
A Primer on Air Pollution. Mobil Oil Corporation; New York, N.Y.

An explanation of the sources of air pollution.

NADLER, ALLEN A., ET AL.
1970 Air Pollution, A Scientists' Institute for Public Information Workbook. Scientists' Institute for Public Information; New York, N.Y. 32 p. (ED 040 062).

Documentation is presented on the known and potential effects of air pollution on human health, weather conditions and the biosphere.

NATIONAL ASSOCIATION OF MANUFACTURERS, AREA INDUSTRIAL PROBLEMS COMMITTEE
1962 Cinderella City: How Community Action Transformed Pittsburgh's Smoked-Stained Identity. The Association; New York, N.Y. 12 p.

Emphasizes the cooperation between the community and industry.

U.S. CONGRESS
1967 Air Quality Act of 1967. Government Printing Office, Washington, D.C.

U.S. DEPARTMENT OF HEALTH, EDUCATION AND WELFARE
1. Air Quality Criteria: Sulfur Oxides.
2. Air Quality Criteria: Photochemical Oxidants.
3. Air Quality Criteria: Particulate Matter.
4. Air Quality Criteria: Carbon Monoxide.
5. Air Quality Criteria: Hydrocarbon
Government Printing Office; Washington, D.C.

Each criteria document gives the effect of different levels of that pollutant on humans, vegetation, and other material.

U.S. DEPARTMENT OF HEALTH, EDUCATION AND WELFARE
1. Control Techniques: Sulfur Oxide Air Pollutants.
2. Control Techniques: Particulate Air Pollutants.
3. Control Techniques: Nitrogen Oxide from Stationary Sources.
4. Control Techniques: Carbon Monoxide, Nitrogen Oxide and Hydrocarbon Emissions from a Mobile source.
5. Control Techniques: Hydrocarbons and Organics, Stationary Source.
6. Control Techniques: Carbon Monoxide Emissions from Stationary Source.
Government Printing Office; Washington, D.C.

Each control technique document presents a state of the art on technology for controlling the emissions of that pollutant.

U.S. DEPARTMENT OF HEALTH, EDUCATION AND WELFARE
1967 Effect of Air Pollution. Public Health Service Publication No. 1556. Government Printing Office; Washington, D.C. 18 p.

Presents the known and suspected effects of various pollutants.

U.S. DEPARTMENT OF HEALTH, EDUCATION AND WELFARE
1968 Sources of Air Pollution and Their Control. Public Health Service Publication No. 1548. Government Printing Office; Washington, D.C. 15 p.

Presents the statistics on the amount and sources of the annual tonnage of "aerial garbage".

U.S. DEPARTMENT OF HEALTH, EDUCATION AND WELFARE
1969 Clean Air Act as Amended (highlights). U.S. Government Printing Office; Washington, D.C. 2 p.

Presents some of the major provisions.

U.S. DEPARTMENT OF HEALTH, EDUCATION AND WELFARE
1970 Progress in the Prevention and Control of Air Pollution: Third Report of the Secretary of Health, Education, and Welfare to the Congress of the United States. Document No. 91–64. U.S. Government Printing Office; Washington, D.C.

Presents activities undertaken by the National Air Pollution Control Administration to fulfill the provisions of the Air Quality Act.

U.S. DEPARTMENT OF HEALTH, EDUCATION AND WELFARE
1970 The Cost of Clean Air: Second Report of the Secretary of Health, Education and Welfare to the Congress of the United States. Document No. 91–95. U.S. Government Printing Office; Washington, D.C.

Presents the amount of emissions and the cost of controlling those pollutants in the United States over a five year interim.

U.S. GOVERNMENT PRINTING OFFICE
1962 Troubled Air. FS 2.98: T75. U.S. Government Printing Office; Washington, D.C. 29 p.

Exploration of what produces air pollutants, their characteristics, the harm they cause, and what is being done about them.

U.S. GOVERNMENT PRINTING OFFICE
1965 Air Pollution and Respiratory Disease. FS 2.2: Ai7/29. U.S. Government Printing Office; Washington, D.C. 22 p.

Developed from laboratory, clinical and epidemiological research, this publication discusses the relationship between air pollution and health.

U.S. GOVERNMENT PRINTING OFFICE
1966 A Digest of State Air Pollution Law. 1966 Edition. FS 2.93: 966 U.S. Government Printing Office; Washington, D.C. 292 p.

Contains a digest of air pollution laws for the fifty states, District of Columbia, Guam, Puerto Rico, and the Virgin Islands.

U.S. GOVERNMENT PRINTING OFFICE
1969 Air Pollution, a National Sample. FS 2.98: Sa4. U.S. Government Printing Office; Washington, D.C. 27 p.

Describes the attempts which have been made to measure the quality of the air that most of us breathe.

U.S. GOVERNMENT PRINTING OFFICE
1966 Clean Air for Your Community. FS 2.98: C58/2. U.S. Government Printing Office; Washington, D.C. 13 p.

Outline of methods and resources to be used in organizing a citizens' clean air group.

U.S. GOVERNMENT PRINTING OFFICE
1966 Guide to Research in Air Pollution. FS 2.98: R31/966. U.S. Government Printing Office; Washington, D.C. 82 p.

This Guide is divided into four sections. The first summarizes the status of air pollution research as a whole. The second lists individual projects under investigation during 1966. The third and fourth sections provide indexes to these projects by subject and by investigator.

U.S. GOVERNMENT PRINTING OFFICE
1966 No Laughing Matter, the Cartoonist Focusses on Air Pollution. FS 2.98: L36. U.S. Government Printing Office; Washington, D.C. 120 p.

In this publication there are 60 cartoons on air pollution that have appeared in a wide variety of newspapers and periodicals.

U.S. GOVERNMENT PRINTING OFFICE
1966 Take Three Giant Steps to Clean Air. FS 2.50/138/2. U.S. Government Printing Office; Washington, D.C. 9 p.

Suggests ways to get the facts on air pollution problems.

U.S. GOVERNMENT PRINTING OFFICE
1966 The Effects of Air Pollution. FS 2.98: EF3/967. U.S. Government Printing Office; Washington, D.C. 13 p.

Disasters and diseases caused by air pollution are reviewed. The booklet discusses the most common pollutants and their effects on life.

U.S. GOVERNMENT PRINTING OFFICE
1967 The Federal Air Pollution Program. FS 2.98: 31/1/967. U.S. Government Printing Office· Washington. D.C. 52 p.

Included is a history of the Federal program and information concerning research, assistance to state and local governments and the abatement and prevention of air pollution.

U.S. GOVERNMENT PRINTING OFFICE
1967 The Sources of Air Pollution and Their Control. FS 2.98: SO8/967. U.S. Government Printing Office; Washington, D.C. 15 p.

Describes the sources of air pollution such as motor vehicles, industry, power plants, space heating, and refuse disposal. Also a description of the controls is given.

U.S. GOVERNMENT PRINTING OFFICE
1970 Third Report of the Secretary of Health, Education and Welfare to the Congress of the United States in Compliance with the Air Quality Act of 1967. Superintendent of Documents, U.S. Government Printing Office; Washington, D.C.

U.S. GOVERNMENT PRINTING OFFICE
1968 Today and Tomorrow in Air Pollution. FS 2.98: T56/2. U.S. Government Printing Office; Washington, D.C. 28 p.

Discussion of the present and future problems of air pollution.

WEST, WALLACE
Clearing the Air: A Layman's Guide to Atmospheric Purity. American Petroleum Institute, Committee on Air and Water Conservation, New York, N.Y.

Presents the facts about the atmosphere and air pollution and discusses one control to reduce photochemical smog.

Articles

ABELSON, PHILIP H.
1968 Progress Toward Abatement of Air Pollution. Science 160: 257 (April).

AYNSLEY, ERIC
1969 How Air Pollution Alters Weather. New Scientist 44: p. 66–67

BRODINE, VIRGINIA ET AL.
1969 The Wind from Dugway. Environment: p. 2–9+ (January–February)

The article is about the killing of sheep in Utah by a chemical warfare agent.

BULLETIN OF THE ATOMIC SCIENTISTS
1965 Man and His Habitat: The Polluted Air. Bulletin of the Atomic Scientists: p.7–25 (June).

DIXON, J. P. AND J. P. LODGE
1965 Air Conservation Report Reflects National Concerns. Science 148: 1060–1066.

DUBOS, RENÉ
1968 Adapting to Pollution. Scientists and Citizens p. 1–8 (January–February).

FERMI, LAURA
1969 Cars and Air Pollution. Bulletin of the Atomic Scientist. p. 35–37 (October).

FRIEDLANDER, MICHAEL W. AND JOSEPH KARMANN
1969 How Many Children? Environment: p. 2–13 (December).

An examination of a study in Sternglass that correlated infant mortality and radioactive fallout.

GLENN, H.T.
1968 Tooling up the Auto Shop for Smog Control. School Shop 28: p. 34–36 (December).

GOLDSMITH, J. R. AND S. A. LANDAW
1969 Carbon Monoxide and Human Health. Science 162: p. 1352–1359.

HAAGEN SMITH, A. J.
1964 The Control of Air Pollution. Scientific American: p. 24–31 (January).

HAVLICK, S. W.
1968 Water Everywhere and Not a Drop for Free. School Science and Mathematics 68: p. 687–690 (November).

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1969 Fishing for a Pollution Solution. American Education 5: p 14–16 (April).

ISLAUER, EDITH
1969 The Ambient Air. The New Yorker: p. 51+ (April).

Describes some of the research that is being done on air pollution.

JOHNSON, KENNETH L. ET AL.
1968 Carbon Monoxide and Air Pollution from Automobile Emissions in New York City. Science 160: p. 67–69. (April).

LANDSBERG, HELMUT E.
1969 Metropolitan Air Layers and Pollution. Garden Journal: p. 54–57. (March–April).

McDERMOTT, W.
1961 Air Pollution and Public Health. Scientific American: p. 49–57. (October).

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1963 Permissible Exposure to Ionizing Radiation. Science 139: p. 565–571.

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1964 Meterology of Air Pollution. Science 146: p. 1119–1128.

PANOFSKY, HANS A.
1969 Air Pollution Meterology. American Scientist 57: p. 269–285

SARGENT, FREDERICK
1967 Adaptive Strategy for Air Pollution. Bioscience 17: p. 691–697.

SCHAEFER, VINCENT J.
1969 Some Effect of Air Pollution on Our Environment. Bioscience 19: p. 896–897.

SCHAEFER, VINCENT J.
1971 The Treat of the Unseen. Saturday Review: p. 55–57 (February).

A discussion about the invisible air pollutants.

SELIKOFF, I. J.
1969 Asbestos. Environment: p. 2–7 (March).

The hazards of asbestos dust.

STARKMAN, E.S.
1968 Chemical Pollution from Transportation Vehicles. School Science and Mathematics 68: p. 477–487 (June).

STEIF, WILLIAM
1970 Why The Birds Cough. The Progressive: p. 47–54 (April).

Discusses the pollution caused by internal combustion, ways to control it, and alternatives to it.

VAN DUUREN, B. L.
1966 Is Cancer Airborne? Scientist and Citizen: p. 1–6. (January).

Indicates that there is a connection between cancer and air pollution.

WOLMAN, ABEL
1968 Air Pollution: Time for Appraisal. Science 159: p. 1437–1439 (March).

ZIMERING, S.
1968 Drive for Cleaner Air. Journal of School Health 38: p. 509–510 (December).

Water Pollution
Books

ARNOV, BORIS, JR.
1969 Homes Beneath the Sea: An Introduction to Ocean Ecology. Little, Brown & Co.; Boston, Mass. 131 p.

Presentation of the effect of currents, pollution, and parasites and other biological phenomena of the sea on plants and animals.

CARR, DONALD E.
Death of the Sweet Waters, Norton; New York, N.Y. ($1.25).

Description of the polluting of lakes, rivers, beaches, and streams.

CARSON, RACHEL
1951 The Sea Around Us. Oxford University Press; New York, N.Y.

COCANNOVER, JOSEPH A.
1958 Water and the Cycle of Life. Devin Adair; New York, N.Y.

COWAN, EDWARD
1968 Oil and Water. Lippincott; Philadelphia, Pa.

"The Torry Canyon Disaster"

GRAHAM, FRANK
1966 Disaster by Default: Politics and Water Pollution. M. Evans; New York, N.Y.

GRAVA, SIGURD
1969 Urban Planning Aspects of Water Pollution Control. Columbia University Press; New York, N.Y.

HANKS, THRIFT G.
1967 Solid Waste Disease Relationship. Public Health Service Publication No. 999-U1H-6. U.S. Government Prining Office; Washington, D.C.

KNEESE, ALLEN V.
1962 Water Pollution: Economic Aspects and Research Needs. Johns Hopkins University Press; Baltimore, Md.

MANNIX, DANIEL P.
Troubled Waters. Pocket Books; New York, N.Y. ($.95).

Describes the life of a fish and the effects of pollution on its environment.

NATIONAL ACADEMY OF SCIENCE COMMITTEE ON POLLUTION
1966 Waste Management and Control. Pub. No. 1400. National Academy of Science; Washington, D.C.

U.S. HOUSE OF REPRESENTATIVES
1964 Water Pollution Control and Abatement. U.S. Government Printing Office; Washington, D.C.

1963–1964 Hearings on the Subcommittee of the Committee on Government Operations.

U.S. HOUSE OF REPRESENTATIVES
1969 Federal Water Pollution Control Act Amendments – 1969. U.S. Government Printing Office; Washington, D.C.

Hearing before the Committee on Public Works.

U.S. HOUSE OF REPRESENTATIVES
1969 Oil Pollution. U.S. Government Printing Office; Washington, D.C.

Hearing before the Committee on Merchant Marine and Fisheries.

Handbooks, Reports, and Pamphlets

BERG, GEORGE G.
1970 Water Pollution. A Scientists' Institute for Public Information Workbook. Scientists' Institute for Public Information; New York, N.Y. 36 p. (ED 040 065).

OFFICE OF MANPOWER STUDIES
1969 Manpower Requirements for Pollution Control and Water Resources in Indiana and a Related Pollution Control Technology Curriculum. Manpower Report 69–100. Purdue University, Office of Manpower Studies; Lafayette, Ind. 70 p. (ED 029 121).

SCHOONOVER, ROBERT A.
1967 The Fight for Clean Water. Florida State Board of Health; Jacksonville, Fla. 118 p. (ED 012 642).

SHURCLIFF, WILLIAM A.
1968 SST and Sonic Boom Handbook. Citizens' League Against the Sonic Boom; Cambridge, Mass.

BONE, QUENTIN AND N. HOLME
1968 Lessons from the Torrey Canyon. New Scientist 39: p. 492–493.

BREIDENBACH, ANDREW W. AND RICHARD W. ELDRIDGE
1969 Research and Development for Better Solid Waste Management. Bioscience 19: p. 984–988.

CAIRNS, JOHN
1968 We're Not in Hot Water. Scientist and Citizen: p. 187–198.

The effects of thermal pollution by power plants.

CARTER, LUTHER J.
1968 Water Pollution: Officials Goaded into Raising Quality Standards. Science 160: p. 49–51 (April)

CLARK, EARL
1967 How Seattle is Beating Water Pollution. Harper's: p. 91–95 (June).

CLARK, JOHN R.
1969 Thermal Pollution and Aquatic Life. Scientific American: p. 18–27 (March)

COLE, LeMONT
1969 Thermal Pollution. Bioscience 19: p. 989–992

COMMONER, BARRY
1968 Lake Erie Aging or Ill? Scientists and Citizen: p. 254–265 (December).

ENVIRONMENT
1969 Poisoning the Wells. Environment: p. 16–23+ (January–February).

The contamination of well water in California by nitrates.

EVANS, DAVID M. AND ALBERT BRADFORD
1969 Under the Rug. Environment: p. 3–13+ (October).

About storing poisonous wastes in deep wells.

GOTAAS, HAROLD B.
1969 Outwitting the Patient Assassin: The Human Use of Lake Pollution. Bulletin of the Atomic Scientists: p. 8–10. (May).

GUPTA, R. S.
1968 Inorganic Nitrogen Compounds in Ocean Stagnation and Nutrient Resupply. Science 160: p. 884+ (May).

HENNIGAN, ROBERT D.
1969 Water Pollution. Bioscience 19: p. 976–978

LOTSPEICH, FREDERICK B.
1969 Water Pollution in Alaska: Present and Future. Science 166: p. 1239–1245.

McCAULL, JULIAN
1969 The Black Tide. Environment: p. 2–16. (November)

MIHURSKY, J.A.
1967 On Possible Constructive Use of Thermal Additions to Estuaries. Bioscience 17: p 698–702.

MONTEGUE, PETER AND KATHERINE MONTEGUE
1971 Mercury: How Much Are We Eating. Saturday Review: p. 50–55 (February).

An examination of the U.S. Government's lack of response to the accumulating evidence against mercury pollution.

OSBORN, G.
1967 Our Water Supply. School Science and Mathematics 67: p. 200–203 (February).

PAUL, BENJAMIN D.
1961 Fluoridation and the Social Scientist: A Review. The Journal of Social Ideas 17: p. 1–12.

SCHRAG, PETER
1969 Life on a Dying Lake. Saturday Review 20: p. 19–21. (September)

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1969 Detergent Enzymes: Biodegradation and Environmental Acceptability. Bioscience 19: p. 1093–1094.

WALSH, JOHN
1968 Pollution: The Wake of the "Torey Canyon". Science 160: p. 167–169 (April)

WAYMAN, COOPER H.
1965 A Hard Look at Soft Detergents. Bulletin of the Atomic Scientists: p. 22–26 (April)

Chemical Pollution (Pesticides)
Books

ALLEN, ROBERT PORTER
1957 On the Trail of Vanishing Birds. McGraw-Hill; New York, N.Y.

CARSON, RACHEL
1962 Silent Spring. Houghton Mifflin; Boston, Mass.

Presents the concept of ecology and the destructive effect that pesticides have on the delicate balance of nature.

DEBACH, PAUL. ED.
1964 Biological Control of Insect Pests and Weeds. Reinhold; New York, N.Y.

"Alternative to Pesticides".

LINTON, RON M.
1970 Terracide: America's Destruction of Her Living Environment. Little, Brown and Co.; Boston, Mass. 376 p.

Gives opinions about how the responsibilities for air pollution should be shared by all levels of government.

MILLER, M.W. AND G.C. BERG
1969 Chemical Fallout – Current Research on Persistent Pesticides. Thomas, Charles C., Publisher; Springfield, Ill.

RUDD, ROBERT L.
1964 Pesticides on the Living Landscape. University of Wisconsin Press; Madison, Wis.

WHITESIDE, THOMAS
Defoliation. Ballantine; New York, N.Y. ($.95).

Examination of military and civilian use of herbicides.

Handbooks, Reports and Pamphlets on

Chemical Pollution (Pesticides)

DAHLSTERS, DONALD L. ET AL

1970 Pesticides, A Scientists' Institute for Public Information Workbook. Scientists' Institute for Public Information; New York, N.Y. 28 p. (ED 040 064).

Collection of articles dealing with the economic and ecological ramifications of pest control.

U.S. SENATE

1964 Interagency Coordination in Environmental Hazards: Pesticides. II Parts. U.S. Government Printing Office; Washington, D.C.

1963–1964 Hearing before the Subcommittee on Reorganization and International Organization of the Committee on Government Operations.

Articles

BARRONS, K.C.
1969 Some Ecological Benefits of Woody Plant Control With Herbicides. Science 165: p. 465-468.

BUTTER, P.A.
1969 Monitoring Pesticide Pollution. Bioscience 19: p. 889-891.

CHENS, T.
1963 Insect Control in Mainland China. Science 140: p. 269–277.

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1965 Pesticide Series No. 1 Problems and Possibilities. Scientists and Citizens: p. 1–13 (April)

CONWAY, GORDON R.
1969 A Consequence of Insecticide. Natural History: p. 46–54. (February).

DUGAN, R.E. and J.R. WEATHERWAX
1967 Dietary Intake of Pesticide Chemicals. Science 57: p. 1006-1010.

FROST, JUSTIN ET AL.
1969 DDT on Balance. Environment: p. 14–40 (July–August).

FROST, JUSTIN ET AL.
1969 DDT on Balance. Environment: p. 2–17+ (September).

GALSTON, ARTHUR W.
1967 Herbicides in Vietnam. New Republic: p. 19–21 (November).

HARBEY, GEORGE R. AND J. D. MANN
1968 Picloram in Vietnam. Scientists and Citizen: p. 168–171 (September).

HENKIN, HARMON
1969 DDT on Trail. Environment: p. 14–17+ (March).

HIGDON, HAL
1969 Obituary for DDT (in Wisconsin). New York Times Magazine: p. 6ff (July).

HIGDON, HAL
1970 Well, If Not DDT, Then What? New York Times Magazine: p. 26ff (January).

JACOBSON, M. AND M. BEROZA
1964 Insect Attractants (Substitute for Insecticides). Scientific American: p. 20–27 (August).

Nuclear Pollution
Books

ALEXANDER, P.
1965 Atomic Radiation and Life. Penguin Books; Baltimore, Md.

CALDER, R.
1962 Living With the Atom. University of Chicago Press; Chicago, Ill.

CURTIS, RICHARD AND ELIZABETH HOGAN
1969 Perils of the Peaceful Atom. Doubleday; New York, N.Y.

DRYERTON, GENE
Nuclear Dilemma. Ballantine; New York, N.Y. ($1.25).

A compilation of a series of articles that analyzes the dangers of nuclear power.

NOVICK, SHELDON
1970 The Careless Atom. Dell Publishing Co.; New York, N.Y.

The necessity of atomic power installations across the country is questioned

RIENOW, ROBERT AND LEONA TRAIN RIENOW
1959 Our New Life With the Atom. Crowell; New York, N.Y.

SCHUBERT, JACK AND RALPH E. LAPP
1957 Radiation. Viking Press; New York, N.Y.

Articles

INGLIS, DAVID R.
1970 Nuclear Pollution and the Arms Race. The Progressive: p. 55-60 (April).

The article is a warning of the dangers of nuclear power plants as the number of plants increase.

NOVICK, SHELDON
1968 Earthquake and Nuclear Power. Scientist and Citizen: p. 230-241 (November).

PEARSALL, S. G. and W. WILSHUSEN
1968 Disposal of Chemical and Radioactive Waste. Journal of Chemical Education 45: A599–605+ (August–September).

PETERSON, MALCOLM L.
1965 Environmental Contamination from Nuclear Reactors. Scientist and Citizen: p. 1-11 (November).

SNOW, JOEL A.
1968 Radioactivity from "Clean" Nuclear Power. Scientist and Citizen: p. 97-101 (May).

STERNGLASS, E. J.
1969 Has Nuclear Testing Caused Infant Deaths? New Scientist 43: 178-181.

WELFORD, G. A. AND W. R. COLLINS, JR.
1960 Fallout in New York City During 1958. Science 131: 1711-1715.

WOODWELL, G.M.
1963 The Ecological Effects of Radiation. Scientific American: p. 40–49 (June).

WOODWELL, G.M.
1967 Radiation and the Patterns of Nature. Science 156: p. 461–470.

WOODWELL, G.M.
1969 Radioactivity and Fallout: The Model Pollution. Bioscience 19: 884–887.

Human Ecology
Books

BENARDE, MARVIN A.
1968 Race Against Famine. Macrae Smith; Philadelphia, Pa.

BORGSTROM, GEORGE
1967 The Hungry Planet. Collier Macmillan; New York, N.Y.

EHRLICH, PAUL R.
1968 The Population Bomb. Ballantine; New York, N.Y.

EHRLICH, PAUL AND ANN EHRLICH
1970 Population, Resources, Environment: Issues in Human Ecology. W.H. Freeman and Co.; San Francisco, Calif. 383 p.

The book centers on the interrelated environmental problems caused by over-population.

HARDIN, GARRETT
1969 Population, Evolution and Birth Control: A College of Controversial Ideas. Freeman; San Francisco, Calif.

HERBER, LEWIS
1962 Our Synthetic Environment. Knopf; New York, N.Y.

HERBER, LEWIS
1965 Crisis in Our Cities. Prentice Hall; Englewood Cliffs, N.J.

PADDOCK, WILLIAM AND PADDOCK, PAUL
1967 Famine——1975! Little, Brown & Co.; Boston, Mass.

VOGT, WILLIAM
1960 People. William Sloane Association; New York, N.Y.

Articles

ANTHROP, DONALD F.
1969 Environmental Noise Pollution: A New Threat to Sanity. Bulletin of the Atomic Scientist: p. 11-16 (May).

BAILEY, ANTHONY
1969 Noise is a Slow Agent of Death. New York Times Magazine: p. 46 ff (November).

BARLOW, BORIS V.
1969 Should We Ban the Boom? New Scientist 43: 434-436.

BERANEK, L.L.
1966 Noise. Scientific American: p. 66-76. (December).

BRAGDON, CLIFFORD R.
1968 Noise - A Syndrome of Modern Society. Scientist and Citizen: p. 29-37. (March).

HOCKEY, R. AND C. HOLLOWAY
1969 Noise and Efficiency. New Scientist 42: 244-248.

DRYTER, R. D.
1966 Psychological Reaction to Aircraft Noise. Science 151: 1346-1355.

KRYTER, K. D.
1969 Sonic Booms from Supersonic Transport. Science 163: 359-367.

MECKLIN, JOHN M.
1969 It's Time to Turn Down All That Noise. Fortune: p. 130–133+ (October)

SCIENTIST AND CITIZEN
1968 Sonic Boom in Relation to Man. Scientist and Citizen; p. 223–229 (November).

WILSON, H.A., JR.
1962 Sonic Boom. Scientific American. p. 36-43. (January).

'70

APPLIED LIFE SCIENCE

Mr. M. Zirkes, Chairman of Science, Park Ridge High School, Park Ridge, N.J. 07565

Activity-oriented approach to the biological and environmental sciences. The students will study air and water pollution and modern biological laboratory techniques.

THE BALARAT CENTER FOR ENVIRONMENTAL STUDIES

C1969 Denver Public Schools, Denver, Colo.

CENTER FOR ENVIRONMENTAL EDUCATION

1967 Mr. Robert E. Collins, Director, 5400 Glenwood Ave., Minneapolis, Minn. 55422

Objective is to develop and test model staff development programs in Environmental Sciences. To develop and test inquiry-oriented, interdisciplinary instructional materials and programs based on socio-ecological interrelationships, and to assist schools and agencies.

CLASSROOM OF TODAY'S WORLD

Miss Evelyn Hunt Ogden, Throckmorton Lane, Old Bridge, N.J. 08851

Activities centered on environmental learning experiences.

COMPREHENSIVE POPULATION EDUCATION PROJECT

1970 Robert W. Stezner, Delaware University, Newark, Del. 8 p. (ED 039 136)

Deals with human population, human needs, the environment, and problems raised by the interrelationships of these factors.

CONSERVATION CURRICULUM IMPROVEMENT PROJECT

Albert H. H. Dorsey, Chief Supervisor, Curriculum Development Section, South Carolina Department of Education, Room 801, Rutledge Building, Columbus, S.C. 29201

The project provides "teacher guides" for conservation education (integrating conservation education with the total school program), background knowledge (elucidating the principles of teaching conservation education), interdisciplinary materials, and cooperative programs for schools and other interest groups.

THE CONSERVATION AND ENVIRONMENTAL SCIENCE CENTER FOR SOUTHERN NEW JERSEY

Dr. V. Eugene Vivian, Box 2230, R. D. 2, Brown Mills, N.J. 08015

Intended to develop viable environmental education programs and a center for their use.

COOPERATIVE UNIVERSITY-HIGH SCHOOL-COUNTY PARKS PROGRAM IN ECOLOGY

Mrs. Carolyn A. Gibson, Room 2633, Cathedral of Learning, Pittsburgh, Pa. 15213

This project for Grades 7–12 for the 1970–1971 academic year puts emphasis on development of an area for investigation, literature search, problem identification, experimental design, statistical evaluation, and final reporting. The teachers, working with the same procedure, will develop a segment of an environmental curriculum in ecology.

DEVELOPMENT OF A NATURE CENTER

Mr. T. Russell Frank, 409 Easton Road, Glenside, Pa.

ECCP - THE MAN MADE WORLD

1965 Dr. E. J. Piel, Box 100, 333 Jay St., Brooklyn, N.Y. 11201

The project is concerned with high schools, community colleges, and liberal arts colleges. The course material covers science, mathematics, and social science. Emphasizes the use of "systems" approach to solving social, personal, political, and environmental problems.

ENVIRONMENTAL SCIENCE

Mr. Lee F. Browne, 351 South Hudson St., Pasadena, Calif. 91106

The center has developed curriculum guides for outdoor education, conservation, pollution, and environmental systems.

ENVIRONMENTAL SCIENCE CENTER

Mr. Richard J. Myshak, 4800 Glennwood Ave., Minneapolis, Minn. 55422

Provides in-service training and curriculum development services.

ENVIRONMENTAL STUDIES INSTITUTE

Dr. James R. Manwaring, Executive Director, Environmental Studies Institute, 1117 East Genesse St., Syracuse, N.Y. 13201

The institute produces instructional programs, serves as an instructional resource center, and does research and evaluation on existing programs. Programs are primarily in the field of environmental quality, human ecology, and land, water, and air pollution. (Elementary School - college).

FAIRFIELD PUBLIC SCHOOLS

Dr. Bette J. DelGiorno, Fairfield, Conn.

Developed the curriculum guides listed:

1. School yard laboratory study (K-6)
2. River laboratory study (3-6)
3. Marine biology and oceanography (K-6)
4. Ecology (K-6)
5. Environmental studies and open spaces (K-6)
6. Science as an integrated study (7-8)

FIELD ECOLOGY

Mr. Jesse M. Harris, Dallas Public School, 3700 Ross Ave., Dallas, Tex. 75204

Offers a field ecology course for advanced biology students.

HABITAT AND RESOURCES

Association of American Geographers, 1146-16th St., N.W., Washington, D.C. 20036

Offers a unit that emphasizes the interaction of man and his natural environment.

HIGH ROCK NATURE CONSERVATION CENTER

George O. Pratt, Jr., Nevada Ave., Staten Island, N.Y. 10306

Has programs for K-12, adult education, teacher education, and general public.

INDEPENDENCE OUTDOOR LABORATORY

Charlotte, N.C.

Environmental Education Program (K-12). Curriculum themes include environmental education (11-12), field ecology (10), Life science (basic ecology (7)), and interrelationships of plants and animals (succession (6)).

JEFFERSON COUNTY OUTDOOR EDUCATION PROGRAM

Jefferson County Schools, Lakewood, Colo.

Developed a one week resident outdoor education program with its main emphasis on ecological relationships. Oriented toward 6th grade classes.

KUTZTOWN PILOT PROJECT

Kutztown Area School District, Kutztown, Pa.

Involved in the National Environmental Education Development pilot program.

LAKESIDE NATURE CENTER

Mr. Daniel G. Dougherty, 5600 East Gregory Blvd., Kansas City, Mo. 64132

Services pre-school to sixth grade classes and strives to promote environmental awareness.

LIFE SCIENCE INVESTIGATION

Mr. James Joseph Gallagher, Director, ERC Science Program, Educational Research Council of America, Rockefeller Bldg., Cleveland, Ohio 44113

A one-year course for seventh grade students that involves the interrelationships between living things and man.

MARINE INFORMATION PROGRAM
Mr. L.W. Longaker, P.O. Box 325, Manteo, N.C. 27954

Plan to develop a summer marine program including a marine biology course, a navigation and seamanship course, a program for training teachers to teach oceanography, and a program to integrate a marine science unit into grades 3-9.

MARINE SCIENCE
Mr. Gene P. Kinghan, Science Department Chairman, Shelter Island High School, Shelter Island, N.Y. 11964

An ". . . in-depth study of the marine organisms is made, based upon the foundation received in biology the year before".

MARINE SCIENCE EDUCATION CENTER
Mr. Jack Berile, Mayport, Fla. 32233

Grades 6-12. Elementary students have one day to do work in biology, physics, and chemistry that is related to the sea. Secondary school students come to the center weekly and work on topics that interest them.

NATURAL - RESOURCE CENTER
1967 Elizabeth and Richard Green, Davidson County Metropolitan Public Schools, Nashville, Tenn. 79 p. (ED 038 206).

NATURAL RESOURCE EDUCATION, DEMONSTRATION CENTER
Ms. Beverly H. Southern, 503 Oak Street, DeKalb, Ill. 60115

Object of the center is to develop environmental understanding and responsibility in students, teachers, and community.

NATURAL SCIENCE RESIDENT CAMP
Mr. Richard C. Dawson, Park and Recreation Department, 5600 E. Gregory Blvd., Kansas City, Mo. 64132

Summer resident center students choose their own ecological research investigation to perform.

NATUREALM
Mr. William M. Barnhart, Associate Director, P.O. Box 87, Duncansville, Pa.

Development of a curriculum guide and a center for outdoor education.

OCEANOGRAPHIC EDUCATION CENTER
Mr. James C. Kinney. P. O. Box 585, Falmouth, Mass. 02541

Summer course in oceanography for teachers and development of teaching aids

OUTDOOR EDUCATION CENTER
C.1967 Mr. John B. Cox, P.O. Box 1927, Albuquerque, N.M.

Teacher Workshops and Day programs in geology, biology (ecology, zoology and botany), conservation, and mathematics are offered.

OUTDOOR EDUCATION LABORATORY
Mr. David C. Thorton, 260 W. 6th Street, Constantine, Mich. 49042

Involvement of students in the development, utilization, and maintenance of the outdoor laboratory. Direct involvement includes cultivation of soil plots, management of pine plantation, and bird banding.

OUTDOOR EDUCATION SCHOOL
Mr. Edwin Wager, 701 N. Madison, Stockton, Calif. 95202

Developed curriculum guides for one week resident programs involving conservation education, ecology, marine tidal pool studies, and earth science.

OUTDOOR LABORATORY
Newark School District, Newark, Del.

Developed a curriculum guide (K-5) for the outdoor laboratory. It includes pre-trip orientation, nature study, indoor-outdoor study for grade four at Science Museum, and development of a nature center on school grounds.

P.L.E.A.S.E. (POLLUTION LIFE AND EARTH APPLIED SCIENCE ENRICHMENT)
The New Jersey State Council for Environmental Education, Mountain Lakes, N.J.

Object was to provide pollution control instruction and to establish air and water pollution monitoring stations.

POLLUTION CONTROL CENTER
Union Public Schools, Administration Bldg. 2369 Morris Ave., Union, N.J. 07803

PROJECT S.P.R.U.C.E.
1969 Final Report and Evaluation of Project S.P.R.U.C.E. (Science Project Related to Upgrading Conservation Education) Ms. Phyllis S. Busch, Ulster County Board of Cooperative Education Services, New Platz, N.Y.

Project S.P.R.U.C.E. is an environmental approach to elementary school science teaching.

REGIONAL ACADEMIC MARINE PROGRAM
The New Jersey State Council for Environmental Education, Mountain Lakes, N.J.

Development of teaching units in marine science and of a summer school program in marine biology for elementary and secondary schools.

THE REGIONAL MARINE SCIENCE PROJECT
Mr. Will Hon, Carteret County Public Schools, Carteret County, N.C.

Experiments in the use of field biology as an approach to understanding coastal environment.

REGIONAL OUTDOOR EDUCATION
Mr. Warren C. Gilfillan, 1441 S.E. 122nd Street, Portland, Ore. 97230

Week long resident outdoor education program for 6th graders.

RESOURCE–USE OUTDOOR EDUCATION CENTER
1970 P.O. Box 539, Perry, Fla. 32347

Evaluation method for the outdoor education center program on environmental studies.

RUTLAND NATURE AREA DEVELOPMENT PROJECT
Mr. Thomas G. Chesley, Dann School, Rutland, Vt.

Developing a "total environmental education program" for K-12, an in-service teacher training program, and a natural area for study.

SCHOOL COMMUNITY OUTDOOR EDUCATION PROJECT
Mr. Norbert Ziemer, 27 N. Main St., Crystal Lakes, Ill. 60014

Developed a curriculum guide and promotes the use of the center by the schools.

SCIENCE INTERPRETIVE CENTER
Mr. Richard C. Cole, Sandy Hook State Park, Box 57, Atlantic Highlands, N.J. 07732

Studies are conducted on a barrier beach in the fields of geology, biology, and marine ecology for elementary and secondary schools.

SEVENTH GRADE LIFE SCIENCE
Mrs. Mariana R. Becker, Science Supervisor, 735 Pembroke Ave., Norfolk, Va. 23507

Activity-oriented ecological approach to the life sciences. It offers units on the community, the dynamics of living things, interrelationships, and man's relation to his environment.

SOUTHEASTERN PENNSYLVANIA OUTDOOR EDUCATION CENTER
Mr. Larry B. Stratton, South Eastern Pennsylvania Outdoor Education Center, Sycamore Mills Rd., Media, Pa. 19063

Develops curriculums for K-graduate school and vocational schools, trains teachers, and provides for a nature center.

STEPPING STONE ENVIRONMENTAL EDUCATION CENTER
Mr. Donald S. Calderon, R.D. No. 1 - Box 369A, Branchville, N.J. 07826

Resident program, Rolling Nature Center, day-use centers, summer enrichment programs, and in-service teacher training programs.

SUMMER INSTITUTE IN FIELD ECOLOGY AND GEOLOGY
C.1967 Mr. Jay E. Anderson, 825 Pennsylvania Ave., Deer Lodge, Mass.

A problem solving approach to ecology and geology is used in this summer program.

THE 1967 SUMMER SCIENCE PROJECT AT UNIVERSITY SCHOOL
Mr. Jonathan E. Ingersoll, Cleveland Public Schools, Cleveland, Ohio 54 p. (ED 014 436).

Describes a six week summer program which contributes to development of educational programs in the natural sciences and introduces urban and suburban students to the natural earth.

TOTAL EDUCATION IN THE TOTAL ENVIRONMENT (TETE)
1964 Mr. William R. Eblen, TETE Project Director, 954 Ridgefield Rd., Wilton, Conn. 06897

Course development in ecology of man (interdisciplinary approach for K-6).

WAVE HILL CENTER ENVIRONMENTAL STUDIES
1970 The Wave Hill (Fordham University) Environmental Education Summer Program, Bronx, N.Y.

Programs for elementary and high school students and an evaluative instrument for the program.

Organizations and Agencies

AMERICAN ASSOCIATION OF UNIVERSITY WOMEN
2401 Virginia Ave. N.W., Washington, D.C. 20037

Resource directory on pollution control.

AMERICAN CANCER SOCIETY
43 South Main St., Doylestown, Pa. 18901

Material related to air pollution.

AMERICAN EDUCATION PUBLICATIONS EDUCATION CENTER
Columbus, Ohio 43216

Material for Grades 7-12. Science in City and Suburbs No. 341, Our Polluted World No. 361, What Insect is That? No. 357. ($.30 each).

AMERICAN INSURANCE ASSOCIATION
110 Williams Street, New York, N.Y. 10038

Kit entitled "Conserving Our Waters and Clearing the Air."

AMERICAN LITTORAL SOCIETY
Sandy Hook, Highlands, N.J. 07732

"Fish and Man in Conflict in the Atlantic Estuaries." ($1.00)

AMERICAN MUSEUM OF NATURAL HISTORY
Central Park West at 79th St., New York, N.Y. 10024

List of publications, slides, and films that are available. The topics include ecology.

AMERICAN PETROLEUM INSTITUTE
1271 Avenue of the Americas, New York, N.Y. 10020

Source for material on air and water pollution.

BUCKS COUNTY OFFICE OF THE SUPERINTENDENT OF SCHOOLS
Mr. Edward H. Garlitz, Science Curriculum Consultant. Administration Bldg., Doylestown, Pa. 18901

Provides consulting aid in development programs and workshops (for teachers) in environmental education.

BUREAU OF RECLAMATION
U.S. Department of the Interior, 19th and C St., N.W., Washington, D.C. 20240

Material on air and water pollution.

CLEAN WATER
Washington, D.C. 20242

Suggestion for fighting water pollution.

CONSERVATION EDUCATION COORDINATOR
Bureau of Sports Fisheries and Wildlife, U.S. Department of Interior, 730 N.E. Pacific Street, Portland, Ore. 97208

CONSERVATION EDUCATION OFFICER
Forest Service, U.S. Department of Agriculture, P.O. Box 3623, Portland, Ore.

CONSERVATION EDUCATION OFFICER
Soil Conservation Service, 507 Federal Building, 701 N.W. Glisan St., Portland, Ore. 97209

CONSERVATION FOUNDATION
1250 Connecticut Ave., N.W., Washington, D.C. 20036

Pamphlets and articles pertaining to ecology.

CONSULTANT ON CONSERVATION AND OUTDOOR EDUCATION
State Department of Education, 312 Public Service Bldg., Salem, Ore. 97310

CORPORATE COMMUNICATIONS
Mr. Edward J. Donn, Vice President, Zurn Industries, Erie, Pa. 16512

Pamphlets concerning air, land, and water pollution control methods and equipment - technical.

DEFENDERS OF WILDLIFE
2000 N. St., N.W., Washington, D.C. 20036

Free pamphlets for educational purposes and a quarterly magazine for members.

DELAWARE VALLEY CITIZENS' COUNCIL FOR CLEAN AIR
311 South Juniper St., Philadelphia, Pa. 19107

Free material and information concerning air pollution.

DEPARTMENT OF AIR POLLUTION CONTROL
9722 W. Watertown Plank Rd., Milwaukee, Wis. 53226

DEPARTMENT OF HEALTH, EDUCATION AND WELFARE
Washington, D.C. 20201

The Office of Education provides Title III grants and services for environmental education programs of activities and materials. The Public Health Service provides research, training, technical assistance, and grants-in-aid for air pollution and solid waste control.

EDUCATION AGENT
Information and Education Division, Oregon State Game Commission, P.O. Box 3503, Portland, Ore. 97208

EDUCATIONAL RELATIONS SECTION
Soil Conservation Service, Department of Agriculture, Washington, D.C. 20250

Publications on teaching about soil-water-plant relationships and a monthly magazine on general conservation.

EDUCATION SERVICE DEPARTMENT
National Audubon Society, 1130 Fifth Avenue, New York, N.Y. 10028

Study programs and other material.

THE ENGINEERING AND TECHNICAL SOCIETIES
Miss Peggy Breen, ETSCO Speakers Bureau, The Franklin Institute, 20th St. and the Parkway, Philadelphia, Pa. 19103

Directory and Speakers Bureau listing. Free programs on pollution of environment suitable for junior high students.

ENGINEERING CONCEPTS CURRICULUM PROJECT
Polytechnical Institute of Brooklyn, 333 Jay Street, Brooklyn, N.Y. 11201

"The Pollution Trap", Technical Note 111 from ECCP Newsletter.

ENVIRONMENT
P.O. Box 755, Bridgeton, Mo. 63044

A layman's magazine which gives technical information on pollution.

ENVIRONMENTAL ACTION
666 11th Street, N.W., Washington, D.C. 20001

Bi-weekly newsletter and action handbooks.

ENVIRONMENTAL DEFENSE FUND
162 Oldtown Road, East Setauket, N.Y. 11733

Newsletter to members. Legal advice.

ENVIRONMENTAL PROTECTION AGENCY
Clean Water, Attention: Publications Office, Washington, D.C. 20460

ENVIRONMENTAL RESOURCES, INC.
Room 300, 2000 P St., N.W., Washington, D.C. 20036

Fact sheet on pollution problems, curriculums, information on local resources and research facilities.

ENVIRONMENTAL MAGAZINE
438 N. Skinker St., Louis Mo. 63130

Monthly publication that deals with the effects of technology on our environment.

FEDERAL WATER POLLUTION CONTROL ADMINISTRATION
Office of Public Information, Crystal Mall, 1921 Jefferson Davis Highway, Arlington, Va. 22202

"The Federal Water Pollution Control Program", "Needed: Clean Water", "About Boats and Water Pollution", "A New Era for America's Waters", "Showdown for Clean Water", "What You Can Do About Water Pollution", "Pollution Caused Fish Kill". (Free or minimal).

THE GARDEN CLUB OF AMERICA
598 Madison Ave., New York, N.Y. 10022

Active at the local level in beautification conservation and open space planning.

GENERAL FEDERATION OF WOMEN'S CLUBS
1734 N. St., N.W., Washington, D.C. 20036

Offers incentive awards for out-standing projects to meet local needs. Its conservation department assists local agencies with their projects in conservation and recreation.

HUGH MOORE FUND
60 East 42nd St., New York, N.Y. 10017

Material on population problems and birth control procedures. List of working organizations.

HUMBLE OIL AND REFINING COMPANY
P.O. Box 218D, Houston, Tex. 77001

INTERSTATE PRINTERS, INC.
Danville, Ill. 61832

They distribute materials published by the National Association of Biology Teachers - free and inexpensive materials, bibliographies, films and filmstrips.

LEAGUE OF WOMEN VOTERS OF THE UNITED STATES
1200 - 17th Street, N.W., Washington, D.C. 20039

LIFE EDUCATION PROGRAM
Box 834, Radio City Station, New York, N.Y. 10019

Reprint No. 69 - "Air Pollution".

ISSAC WALTON LEAGUE OF AMERICA
1326 Waukegan Road, Glenview, Ill. 60025

Conservation newsletters, leaflets, and a pamphlet entitled "Clean Water–It's Up to You".

KEEP AMERICA BEAUTIFUL, INC.
99 Park Avenue, New York, N.Y. 10016

National, non-profit, public service organizations for the prevention of litter and for the enhancement of urban and rural scenic and man-made beauty.

LOWER BUCKS COUNTY JOINT MUNICIPAL AUTHORITY
Levittown, Pa. 19053

Pamphlet on water and sewage treatment plant procedures.

MANUFACTURING CHEMISTS ASSOCIATION
1825 Connecticut Ave., N.W., Washington, D.C. 20009

Films for loan on conservation and pollution.

NATIONAL AIR POLLUTION CONTROL ADMINISTRATION
Publication Unit, 5600 Fishers Lane, Rockville, Md. 20852

Free material on air pollution (specify–teacher or private citizen, what level and subject–when ordering).

NATIONAL ASSOCIATION OF CONSERVATION DISTRICTS
1025 Vermont Ave., N.W., Washington, D.C. 20005

"The Environmental Action Guide". This leaflet lists projects and available material.

NATIONAL ASSOCIATION OF COUNTIES
Suite 522, 1001 Connecticut Ave., N.W., Washington, D.C. 20036

Publishes a variety of information on air and water pollution, parks, etc.

NATIONAL CENTER FOR AIR POLLUTION CONTROL
Department of Health, Education and Welfare, Washington, D.C.

Offers grants, technical assistance, and personnel training for air pollution control programs.

NATIONAL PARKS ASSOCIATION
1701 - 18th St., N.W., Washington, D.C. 20036

Pamphlets on thermal pollution, noise pollution, pesticides, and basic ecology.

NATIONAL PARKS AND CONSERVATION ASSOCIATION
1701 - 18th St., N.W., Washington, D.C. 20036

For members - "The Environmental Journal" (semi-technical).

NATIONAL PLANT FOOD INSTITUTE
1700 K. St., N.W., Washington, D.C. 20006

NATIONAL TUBERCULOSIS AND RESPIRATORY DISEASE ASSOCIATION
1740 Broadway, New York, N.Y. 10019

Also

Bucks County Tuberculosis and Respiratory Disease Association, Doylestown, Pa. 18901

Literature on air pollution.

NATIONAL WILDLIFE FEDERATION
1412 16th St., N.W., Washington, D.C. 20036

State and National Conservation directory of sources of conservation and environmental information.

THE NATURE CONSERVANCY
Suite 800, 1800 North Kent Street, Arlington, Va. 22209

Preserves specific areas, works with groups, and produces a quarterly magazine for its members.

OFFICE OF EDUCATION
Department of Health, Education and Welfare, Washington, D.C.

Curriculum development and innovative center grants for local school systems. Grants for adult education on community problems such as urban planning and conservation.

OPEN SPACE INSTITUTE
145 East 52nd St., New York, N.Y. 10022

Intermittent reports with membership; publications, especially on ways leaders can preserve open spaces.

PENNSYLVANIA DEPARTMENT OF EDUCATION
Bureau of General and Academic Education, Box 911, Harrisburg, Pa. 17126

List of publications on Outdoor Education 1968-1969. Guidelines for Environmental Sensitivity, 1969.

PENNSYLVANIA DEPARTMENT OF HEALTH FILM LIBRARY
Division of Public Health Education, P.O. Box 90, Harrisburg, Pa. 17120

Films on air and water pollution and what is being done about them.

PENNSYLVANIA DEPARTMENT OF HEALTH, REGION VII
Philadelphia State Office Bldg., 1400 West Spring Garden St., Philadelphia, Pa. 19130

Pamphlets on air and water pollution.

PLANNED PARENTHOOD ASSOCIATION OF BUCKS COUNTY
Sellersville, Pa. 18960

Free information on birth control and population problems.

PLANNED PARENTHOOD, WORLD POPULATION
515 Madison Ave., New York, N.Y. 10022

Bibliography, film guide, and reprints.

POPULATION CRISIS COMMITTEE
1730 K. St., N.W., Washington, D.C. 20006

Free bi-monthly newsletter; federal policy statement; other publications.

POPULATION REFERENCE BUREAU
1955 Massachusetts Ave., N.W., Washington, D.C.

Bibliography, source list, and film guide on population.

PORTLAND CEMENT ASSOCIATION
Old Orchard Rd., Skokie, Ill. 60076

"Public bond issue campaigns", "Financing Water and Sewage Works" (Free).

PORTLAND CENTER OF CONTINUING EDUCATION
P.O. Box 1491, Portland, Ore. 97201

"Observing Our Environment" written to orient elementary students to the environment.

PROJECT MAN'S ENVIRONMENT
National Education Association, 1201 - 16th St., N.W., Washington, D.C. 20036

Information on environmental study areas.

PUBLIC AFFAIRS PAMPHLETS
381 Park Ave., South, New York, N.Y. 10016

Two pamphlets – "An Environment Fit for People" and "The Battle for Clean Air".

RESOURCE UTILIZATION SPECIALIST
Bureau of Land Management, U.S. Department of Interior, P.O. Box 2965, Portland, Ore. 97208

SAINT REGIS PAPER CO.
150 East 42nd St., New York, N.Y. 10017

Charts on forest ecology.

SIERRA CLUB
Mills Tower, San Francisco, Calif. 94104

Bibliography and information pertaining to pollution and population.

SHELL OIL COMPANY
50 W. 50th St., New York, N.Y. 10020

STATE FORESTER
State Forester Department, 2600 State St., Salem, Ore. 97310

SUPERINTENDENT OF DOCUMENTS
Government Printing Office, Washington, D.C. 20402

Publishes pamphlets on pollution.

U.S. DEPARTMENT OF HEALTH, EDUCATION AND WELFARE
National Air Pollution Control Administration, 801 North Randolph St., Arlington, Va. 22203

Literature and posters on air pollution.

U.S. DEPARTMENT OF INTERIOR
National Park Service, N.E. Region, 143 South Third St., Philadelphia, Pa. 19106

Program on Environmental Education.

WATER RESOURCES ASSOCIATION OF THE DELAWARE RIVER BASIN
901 Stephen Girard Bldg., 21 South12th St., Philadelphia, Pa. 19107

Literature on pollution and flood and water supply problems.

THE WILDERNESS SOCIETY
729 - 15th St., N.W., Washington, D.C. 20005

Pamphlets, reports, and reprints on preservation and use of our natural resources.

WILDLIFE MANAGEMENT INSTITUTE
709 Wire Bldg., Washington, D.C. 20005

Free copy of material on wildlife; consultation with public agencies.

ZERO POPULATION GROWTH
367 State St., Los Altos, Calif. 94022

Disseminates newsletters, brochures, ecology leaflets, and reprints.

Bibliographies

BUREAU OF GENERAL AND ACADEMIC EDUCATION
1970 Conservation and Outdoor Education Workshops. Department of Education, Harrisburg, Pa.

A national directory of workshops on outdoor education.

CARVAJAL, JOAN AND MARTHA E. MUNZER
1968 Conservation Education, A Selected Bibliography. Conservation Education Association, Billings, Mont. (ED 017 480).

The document categorizes titles in the areas of ecology, quality of the environment, etc.

CONSERVATION AND ENVIRONMENTAL SCIENCE CENTER
1970 Pamphlet: listing of CESC books and materials. The Center; Brown Mills, N.J.

Textbooks, programs, and materials.

CROFTS EDUCATIONAL SERVICE INC.
1970 Secondary Curriculum Letter 9: 1 p. (April).

Where to search for aids to environmental education.

DEMSEY, DAVID
1970 Environment Bookshelf. Saturday Review: p. 61 (March 7).

EDUCATION, U.S.A.
1970 Previews of Magazines, TV, Radio, Books, Reports. Education, U.S.A.: p. 172.

HEPBURN, LAWRENCE AND MARY HEPBURN
1970 Instructional Media: Media for Teaching About the Environment. Journal of the National Council for the Social Studies 35: p. 93–100 (January).

JOURNAL OF THE NATIONAL COUNCIL FOR THE SOCIAL STUDIES
1971 ERIC Clearinghouse – Environmental Education: Sources and Approaches for the Social Studies Teacher. Journal of the National Council for the Social Studies 35: p. 119–120 (January).

JOURNAL OF THE NATIONAL COUNCIL FOR THE SOCIAL STUDIES
1971 Paperbacks from C/Q. Journal of the National Council for the Social Studies 35: p. 110 (January).

JOURNAL OF THE NATIONAL COUNCIL FOR THE SOCIAL STUDIES
1971 Sources and Resources: Environmental Agencies, Organizations and Publications. Journal of the National Council for the Social Studies 35: p. 78–83 (January).

LOCKARD, J. DAVID, ED.
1970 Seventh Report on the International Clearinghouse on Science and Mathematics Curriculum Development. American Association for the Advancement of Science; Washington, D.C. 690 p. (ED 040 083).

Report on projects involving curriculum development

NATIONAL AUDUBON SOCIETY
1968 Nature Centers and Outdoor Education Facilities. The Society; New York, N.Y. 32 p. (ED 029 483).

List of local programs and centers.

NATIONAL AUDUBON SOCIETY
1969 Directory of Environmental Education Facilities. National Audubon Society; New York, N.Y. (ED 037 942).

NATIONAL EDUCATION ASSOCIATION
Pollution. (A bibliography). NEA; Washington, D.C.

NATIONAL SCIENCE TEACHERS ASSOCIATION
1970 Environmental Education for Everyone – Bibliography of Curriculum Materials for Environmental Studies. NSTA; Washington, D.C. 50 p.

NATION'S SCHOOLS
1970 Where to Get Instructional Aids. Nation's Schools: p. 30–31 (March).

NEW JERSEY STATE COUNCIL FOR ENVIRONMENTAL EDUCATION
1968 New Jersey School District Survey of Environmental Education Programs. The Council; Mountain Lakes, N.J.

Survey of programs and sites in New Jersey.

NEW JERSEY STATE COUNCIL FOR ENVIRONMENTAL EDUCATION
1968 PACE Outdoor and Environmental Education Projects–National Listing. The Council; Mountain Lakes, N.J. 77 p. (ED 024 504).

NEW JERSEY STATE COUNCIL FOR ENVIRONMENTAL EDUCATION
1970 Environmental Education Title III: New Jersey Projects. The Council; Mountain Lakes, N.J. 2 p.

POLLUTION ABSTRACTS
1970 Pollution Abstracts, LaJolla, Calif.

Contains citations and abstracts of information pertaining to pollution. Six issues a year - $35.00 from the 1970 calendar year (regular subscription price $70.00). Information reviewed includes: domestic and foreign technical reports, contracts, journals, symposia, governmental documents, patents and newspapers. Available from – Pollution Abstracts, c/o Oceanic Library and Information Center, P.O. Box 2369, LaJolla, Calif. 92037

SMAC – NEWSLETTER
1970 Environmental Education - Bulletin SMAC 3:6

Listing of programs, films, books, grants, fellowships, and contracts related to environmental education.

U.S. DEPARTMENT OF HEALTH, EDUCATION AND WELFARE
1969 Free Films on Air Pollution. Public Health Service Publication No. 1264. Government Printing Office; Washington, D.C. 20 p.

U.S. DEPARTMENT OF HEALTH, EDUCATION AND WELFARE
1969 Selected Sources of Environmental Conservation Education Materials. Government Printing Office; Washington, D.C.

U.S. GOVERNMENT PRINTING OFFICE
1966 Air Pollution Publications. FS 2.24: Ai7/963-66. U.S. Government Printing Office; Washington, D.C.

Bibliography, 1963–66, on air pollution. Contains 900 entries.

U.S. GOVERNMENT PRINTING OFFICE
1966 Air Pollution Training Program. FS 2.98: T68. U.S. Government Printing Office; Washington, D.C. 42 p.

This catalogue lists the universities which offer graduate programs in the field of air pollution and describes briefly what the programs consist of and what the entrance requirements are.

U.S. GOVERNMENT PRINTING OFFICE
1967 Free Film on Air Pollution on Loan for Group Showing. FS 2.2: Ai7/30/967. U.S. Government Printing Office; Washington, D.C.

Contains a list of free films available for groups and organizations concerned with the national air pollution problems.

U.S. GOVERNMENT PRINTING OFFICE
C.1969 Air Pollution Publications: A Selected Bibliography with Abstracts 1966–1968. Superintendent of Documents, U.S. Government Printing Office; Washington, D.C. 532 p.

U.S. PUBLIC HEALTH SERVICE
1965 Sulfur Oxides and Other Sulfur Compounds: A Bibliography with Abstracts. U.S. Government Printing Office; Washington, D.C.

U.S. PUBLIC HEALTH SERVICE
1966 Carbon Monoxide: A Bibliography with Abstracts. U.S. Government Printing Office; Washington, D.C.

VANARIA, LOUIS M.
1971 Pamphlets. Journal of the National Council for the Social Studies 35: p. 107–109+ (January).

Pamphlets and government publications on ecology and the environment.

WASHINGTON EDUCATION MAGAZINE
1970 A World Worth Living In. Washington Education Magazine: p. 22–23 (May).

Bibliography of books, tapes, and films.

WATT, LOIS B. AND MYRA H. THOMAS, ED.
1970 Environmental Ecological Education: Resources for Elementary and Secondary Schools. Office of Education, U.S. Department of Health, Education and Welfare; Washington, D.C.

WESTINGHOUSE LEARNING CORPORATION
1971 Learning Directory 1970–71. Westinghouse Learning Corporation; New York, N.Y.

A directory to instructional material in all media, for all audiences, and for all types of learning situations.